



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

JOURNAL OF THE TRANSACTIONS
OF
THE VICTORIA INSTITUTE.
—
VOL. VI.

JOURNAL OF
THE TRANSACTIONS
OF
The Victoria Institute,
OR
Philosophical Society of Great Britain.

EDITED BY THE HONORARY SECRETARY.

VOL. VI.

^e
LONDON :

(Published for the Institute)

ROBERT HARDWICKE, 192, PICCADILLY, W.

1873.

ALL RIGHTS RESERVED.

~~VIII, 284~~

LSoc 1801.40

NOV 23 1883

Harvest Festival.

WYMAN AND SONS, PRINTERS,
GREAT QUEEN STREET, LINCOLN'S-INN FIELDS,
LONDON, W.C.

COUNCIL & OFFICERS FOR 1872-73.

President.

THE RIGHT HON. THE EARL OF SHAFTESBURY, K.G.

Vice-Presidents.

PHILIP HENRY GOSSE, ESQ., F.R.S.

REV. WALTER MITCHELL, M.A.

* CHARLES BROOKE, ESQ., M.A., M.B., F.R.S., F.R.C.S., &c.

REV. ROBINSON THORNTON, D.D.

Honorary Foreign Correspondent.

CONSTANTIN DE TISCHENDORF, Th.D., Ph.D., D.C.L., LL.D.,
Prof. Bib. Paleo., Univ. Leipsic.

Honorary Treasurer.

WILLIAM NOWELL WEST, ESQ.

Hon. Sec. and Editor of the Journal.

CAPTAIN FRANCIS W. H. PETRIE, F.R.S.L., &c.

Honorary Foreign Secretary.

EDWARD J. MORSHEAD, ESQ., H.M.C.S.

Council.

ROBERT BAXTER, ESQ. (*Trustee.*)

REV. A. DE LA MARE, M.A.

REAR-ADMIRAL E. G. FISHBOURNE, R.N., C.B.

ROBERT N. FOWLER, ESQ., M.A., M.P. (*Trustee.*)

WILLIAM H. INCE, ESQ., F.L.S., F.R.M.S.

ALEXANDER McARTHUR, ESQ., F.R.G.S., F.A.S.L.

ALFRED V. NEWTON, ESQ., F.A.S.L.

WILLIAM M. ORD, ESQ., M.D.

WILLIAM VANNER, ESQ., F.R.M.S.

S. D. WADDY, ESQ., B.A., Barrister-at-Law.

ALFRED J. WOODHOUSE, ESQ., M.R.I., F.R.M.S.

REV. JAMES H. RIGG, D.D.

* REV. C. A. ROW, M.A.

* REV. J. H. TITCOMB, M.A.

J. A. FRASER, ESQ., M.D., I.G.H.

REV. G. HENSLOW, M.A., F.L.S.

* REV. CHARLES GRAHAM.

T. W. MASTERMAN, ESQ.

H. CADMAN JONES, ESQ., M.A.

REV. J. G. WOOD, M.A., F.L.S., &c.

REV. W. ARTHUR, D.D.

C. R. BREE, ESQ., M.D., F.Z.S.

J. T. PRICHARD, ESQ., F.S.S., Barrister-at-Law.

* Editorial Committee of Reference.

Objects of the Victoria Institute.

First.—To investigate fully and impartially the most important questions of Philosophy and Science, but more especially those that bear upon the great truths revealed in Holy Scripture, with the view of reconciling any apparent discrepancies between Christianity and Science.

Second.—To associate men of Science and authors who have already been engaged in such investigations, and all others who may be interested in them, in order to strengthen their efforts by association ; and by bringing together the results of such labours, after full discussion, in the printed Transactions of an Institution ; to give greater force and influence to proofs and arguments which might be little known or even disregarded if put forward merely by individuals.

Third.—To consider the mutual bearings of the various scientific conclusions arrived at in the several distinct branches into which Science is now divided, in order to get rid of contradictions and conflicting hypotheses, and thus promote the real advancement of true Science ; and to examine and discuss all supposed scientific results with reference to final causes, and the more comprehensive and fundamental principles of Philosophy proper, based upon faith in the existence of one Eternal God, who in His wisdom created all things very good.

Fourth.—To publish Papers read before the Society in furtherance of the above objects, along with full reports of the discussions thereon, in the form of a Journal, or as the Transactions of the Institute.

Fifth.—When subjects have been fully discussed, to make the results known by means of Lectures of a more popular kind ; and to publish such Lectures.

Sixth.—To publish English translations of important foreign works of real scientific and philosophical value, especially those bearing upon the relation between the Scriptures and Science ; and to co-operate with other philosophical societies at home and abroad, which are now or may hereafter be formed, in the interest of Scriptural truth and of real Science, and generally in furtherance of the objects of this Society.

Seventh.—To found a Library and Reading Rooms for the use of the Members of the Institute, combining the principal advantages of a Literary Club.

Terms of Membership, &c.

THE Objects of the Victoria Institute being of the highest importance both to Science and Religion, while they are such as have not been attempted to be attained by any previously existing scientific society, it is anticipated that when its establishment is known, it will receive the most liberal support by gifts and donations from friends, and be joined by large numbers of Members and Associates.

The annual subscription for Members is Two Guineas each, with One Guinea Entrance Donation.

The annual subscription for Associates is One Guinea each, without any Entrance Fee.

Life Members to pay Twenty Guineas; and Life Associates to pay Ten Guineas, respectively, in lieu of the above Annual Subscriptions.

Vice-Patrons (ladies or gentlemen) to pay not less than Sixty Guineas each, as a Donation to the funds of the Institute.

. All who join the Society as *Members* must be professedly Christians.

. *Applications for admission and general correspondence (as to papers proposed to be read, &c.) should be addressed to the Honorary Secretary of the Institute.*

. ALL ANNUAL SUBSCRIPTIONS BECOME DUE IN ADVANCE ON JANUARY 1ST IN EACH YEAR, AND IT IS PARTICULARLY REQUESTED THAT THEY MAY BE REGULARLY REMITTED TO THE HONORARY TREASURER, W. N. WEST, ESQ., AT THE OFFICE, 8, ADELPHI TERRACE, STRAND, LONDON, W.C. CHEQUES TO BE CROSSED "RANSOM & CO." POST OFFICE ORDERS TO BE CROSSED IN LIFE MANNER, AND MADE PAYABLE AT THE CHIEF MONEY-ORDER OFFICE, LONDON (DONATIONS TO THE *Endowment Fund*, OR THE *Library Fund* MAY BE SENT IN LIKE MANNER.)

Any risk attendant on sending money by post will be avoided by Members and Associates giving their Bankers authority to pay the subscriptions, "for the Victoria Institute," to Messrs. Ransom & Co., Bankers, 1, Pall Mall East, London, S.W. Forms for this purpose are furnished by the Institute.

FORM OF BEQUEST.

I give and bequeath to the Trustees or Trustee for the time being of the VICTORIA INSTITUTE, OR PHILOSOPHICAL SOCIETY OF GREAT BRITAIN, to be applied by them or him for the purposes of the said Society, the sum of £ , such sum to be wholly paid out of such part of my personal estate as may be lawfully applied to the purposes of charity, and in priority to all other legacies. And I declare that the receipt of the Trustees or Trustee for the time being of the said Society shall be a good discharge to my Executors for the said legacy.

CONTENTS OF VOLUME VI.

| | <i>Page</i> |
|--|-------------|
| COUNCIL AND OFFICERS FOR 1872-73 | v |
| OBJECTS OF THE VICTORIA INSTITUTE | vi |
| TERMS OF MEMBERSHIP, &c. | vii |
| FORM OF BEQUEST | viii |
| PREFACE | xiii |

JOURNAL OF TRANSACTIONS.

| | |
|--|----|
| ORDINARY MEETING, 6TH JUNE, 1870 | 1 |
| ON CIVILIZATION, MORAL AND MATERIAL. BY JAMES REDDIE, ESQ. | |
| (THE LATE) | 1 |
| DISCUSSION ON MR. REDDIE'S PAPER | 31 |
| ORDINARY MEETING, 16TH JANUARY, 1871 | 44 |
| ON DR. NEWMAN'S ESSAY IN AID OF A GRAMMAR OF ASSENT. BY | |
| THE REV. C. A. ROW, M.A. | 45 |
| DISCUSSION ON MR. ROW'S PAPER | 74 |
| INTERMEDIATE MEETING, 30TH JANUARY, 1871 | 91 |

| | <i>Page</i> |
|---|-------------|
| ORDINARY MEETING, 6TH FEBRUARY, 1871 | 92 |
| ON THE EVIDENCE OF THE EGYPTIAN MONUMENTS TO THE SOJOURN OF ISRAEL IN EGYPT. BY THE REV. B. W. SAVILE, M.A. ... | 93 |
| DISCUSSION ON MR. SAVILE'S PAPER | 107 |
| MR. SAVILE'S REPLY | 119 |
| THE MOABITE STONE. BY THE EDITOR | 125 |
| INTERMEDIATE MEETING, 20TH FEBRUARY, 1871 | 128 |
| ON PHYLLOTAXIS; OR, THE ARRANGEMENT OF LEAVES IN ACCORDANCE WITH MATHEMATICAL LAWS. BY THE REV. G. HENSLOW, M.A. ... | 129 |
| ORDINARY MEETING, 4TH MARCH, 1872 | 141 |
| ON PREHISTORIC MONOTHEISM CONSIDERED IN RELATION TO MAN AS AN ABORIGINAL SAVAGE. BY THE REV. J. H. TITCOMB, M.A. ... | 141 |
| DISCUSSION ON MR. TITCOMB'S PAPER | 155 |
| ORDINARY MEETING, 6TH MARCH, 1871 | 166 |
| ON BIBLICAL PNEUMATOLOGY AND PSYCHOLOGY. BY THE REV. W. W. ENGLISH, M.A. | 166 |
| DISCUSSION ON MR. ENGLISH'S PAPER | 180 |
| MR. ENGLISH'S REPLY | 198 |
| INTERMEDIATE MEETING, 20TH MARCH, 1871... .. | 200 |
| ORDINARY MEETING, 10TH APRIL, 1871 | 201 |
| ON SOME SCRIPTURAL ASPECTS OF MAN'S TRIPARTITE NATURE. BY THE REV. C. GRAHAM | 202 |
| DISCUSSION ON MR. GRAHAM'S PAPER | 220 |
| INTERMEDIATE MEETING, 17TH APRIL, 1871 | 232 |
| ORDINARY MEETING, 1ST MAY, 1871 | 233 |
| ON ETHNIC TESTIMONIES TO THE PENTATEUCH. BY THE REV. J. H. TITCOMB, M.A. | 234 |
| DISCUSSION ON MR. TITCOMB'S PAPER | 258 |

| | <i>Page</i> |
|---|-------------|
| INTERMEDIATE MEETING, 15TH MAY, 1871 | 272 |
| ANNUAL GENERAL MEETING, MAY 22ND, 1871 | 273 |
| FIFTH ANNUAL REPORT | 273 |
| ANNUAL ADDRESS. BY THE REV. W. J. IRONS, D.D. | 284 |
| ORDINARY MEETING, DECEMBER 4TH, 1871 | 318 |
| OBSERVATIONS ON THE SERPENT MYTHS OF ANCIENT EGYPT. BY W. R. COOPER, ESQ., F.R.S.L. | 321 |
| DISCUSSION ON MR. COOPER'S PAPER | 393 |

| | |
|---|-----|
| APPENDIX A.—LIST OF THE VICE-PATRONS, MEMBERS, ASSOCIATES, AND LOCAL HONORARY SECRETARIES | 405 |
| APPENDIX B.—LIST OF BOOKS IN THE LIBRARY | 445 |
| APPENDIX C.—RULES AND BYE-LAWS | 469 |

P R E F A C E.

I N issuing the sixth volume of the *Journal of the Transactions* of the VICTORIA INSTITUTE—now commencing the eighth year since its organization—some remarks on the present position of the Institute will not be out of place.

In the Preface to the fifth volume the following statement was made :—“ After a full review of the requirements of the Institute, and of all it is now called upon to do on behalf of the cause advocated, it appears that when the number of Members and Associates has been raised to five hundred (of which not more than one hundred should be Associates) the Society may be considered adequate to accomplish its objects, and placed in the position so desirable that it should hold. The necessity for action in this matter will, it is hoped, press itself on each Member and Associate.”*

It will be no small gratification to the Members and Associates, whose firm support has greatly tended to the Institute's strength and stability, to be informed that one hundred and fourteen Members and Associates joined during the past year ; among whom are several professors of Oxford, Cambridge, and other Universities. The total strength of the Institute is now upwards of four hundred, having become more than double in two years. It will, however, be observed that further effort is necessary ere the required number is attained.

The demand for the Institute's publications is rapidly increasing.

* Vide the speech of the Right Rev. the Bishop of Gloucester and Bristol, page 314.

The present volume of the Transactions contains, among other papers, the last read by the late Honorary Secretary, Mr. J. Reddie; also one on "The Serpent Myths of Ancient Egypt," which may require a prefatory word. It throws more general light on the religious worship of the ancient Egyptians than any essay hitherto published, and its appearance now is opportune, considering the efforts that are made by some to trace the religion of the Israelites to an Egyptian source.

As regards the work in which the Institute is engaged, it is satisfactory to note the concluding statement in the President's address at the meeting of the British Association in 1872:—"When science, passing beyond its own limits, assumes to take the place of theology, and sets up its own conception of the order of nature as a sufficient account of its cause, it is invading a province of thought to which it had no claim, and not unreasonably provokes the hostility of those who ought to be its best friends."

Attacks on Revealed Religion tend to injure the progress of true science, and it would be well if those, whose scientific labours are otherwise of no small value, were deterred by Dr. Carpenter's remarks from continuing assaults made with the foregone conclusion that the Christian Religion is unworthy of credence.

Upon this subject generally, the Right Honourable W. E. Gladstone, in his Address delivered at Liverpool College, in December, 1872, spoke as follows: "Belief cannot now be defended by reticence, any more than by railing, or by any privileges or assumptions. Nor, again, can it be defended exclusively by its 'standing army'—by priests and ministers of religion. To them, I do not doubt, will fall the chief share of the burden, and of the honour, and of the victory. But we commit a fatal error if we allow this to become a mere professional question. It is the affair of all. . . . The combat is now with men who commonly confess not only that Christianity has done good, but even that it may still confer at least some relative benefit before the day of perfect pre-

paredness for its removal shall arrive; and one of the most 'advanced' of whom appears to be touched by a lingering sentiment of tenderness, while he blows his trumpet for a final assault at once upon the 'Syrian Superstition' and, on the poor, pale, and semi-animate substitutes for it, which Deism has devised. It is not now only the Christian Church, or only the Holy Scripture, or only Christianity, which is attacked. The disposition is boldly proclaimed to deal alike with root and branch, and to snap utterly the ties which, under the still venerable name of religion, unite man with the unseen world, and lighten the struggles and the woes of life by the hope of a better land. These things are done as the professed results, and the newest triumphs of Modern Thought and Modern Science; but I believe that neither Science nor Thought is responsible, any more than Liberty is responsible, for misdeeds committed in their names."

F. PETRIE,

Hon. Sec. and Editor.

31ST DECEMBER, 1872.

JOURNAL OF THE TRANSACTIONS
OF THE
VICTORIA INSTITUTE,
OR
PHILOSOPHICAL SOCIETY OF GREAT BRITAIN.

ORDINARY MEETING, JUNE 6, 1870.

THE REV. J. H. RIGG, D.D., IN THE CHAIR.

The Minutes of the last Meeting were read and confirmed.

The following elections were announced :—

ASSOCIATES, 2ND CLASS.—J. S. SUTCLIFFE, Esq., Bacup ; Rev. J. TURNER, B.A., Deddington.

Also the presentation of the following books for the Library :—

Fresh Springs of Truth. By J. Reddie, Esq.
History of Prussia.

From the Author.
From C. Dibdin, Esq.

Mr. JAMES REDDIE then read the following paper :—

ON CIVILIZATION, MORAL AND MATERIAL : (*Also in reply to Sir John Lubbock, F.R.S., on Primitive Man ;*)
By JAMES REDDIE,* Esq., Hon. Mem. Dial. Soc., Edin. Univer., HONORARY SECRETARY, *Vict. Inst.*

1. **T**HIS paper is supplementary to three former Essays by the author, bearing upon the same subject. The first was a paper "On Anthropological Desiderata," read before

* The late.

the Anthropological Society of London in February, 1864;* the second was published in the *Ethnological Journal* for October, 1865, with the title, "Man, Savage and Civilized: an Appeal to Facts;" and the third was the first paper I had the honour of reading before the VICTORIA INSTITUTE, in our first session in July, 1866,† "On the various Theories of Man's Past and Present Condition," the greater portion of which Paper was subsequently read in the Ethnological Section of the British Association for the Advancement of Science, at Nottingham, in August, 1866.‡

2. In all these Essays my object was to rebut and refute the notion that man could either have been created in a low and almost brutal condition, like what we now find him to be among the lowest and most ignorant savage races; or that he could ever have been transmuted from some kind of monkey or other beast, by natural selection or any other natural process, into man. In the first of these papers I said: "Apart from the physiological objections (which seem to be insuperable) to the theory of transmutation, the grand issue to be decided by anthropologists will mainly depend upon what we can discover, as to whether savage man can civilize himself or not. If not, there simply cannot be a doubt that the 'primitive man' was neither a savage nor his ancestor an ape. And, apart from theories altogether, the existence of mankind, both in a civilized and savage condition, naturally suggests to us the inquiry: To which of these distinctive classes did the primitive man probably belong?" This showed that I was quite prepared to discuss this question with reference to existing facts, and not to press too hardly upon the Darwinians to justify their extravagant speculations as to man's origin, which go beyond all our knowledge and experience of the facts of the animal creation and of human nature. I also then said: "Before this question can be satisfactorily answered, however, or even discussed with advantage, it seems necessary to arrive at some definite understanding as to the meaning of the word civilization with reference to anthropological considerations."

3. It is to supply this desideratum I now write. But I have also another object—a pledge to fulfil—which I must endeavour at the same time to accomplish; and that is, to reply to a Paper by Sir John Lubbock on the same subject. His Paper I heard read in the Ethnological Society of London on 26th November, 1867, and by his courtesy I have since been furnished with a copy of it. It was afterwards read by him at

* *Anthrop. Rev.*, vol. ii. p. cxv. et seq.

† *Journ. of Trans.*, vol. i. p. 174, et seq.

‡ *Ib.*, p. 214.

the British Association for the Advancement of Science at Dundee, and in the Royal Institution of Great Britain. Its title is: "On the Origin of Civilization and the Primitive Condition of Man," which well describes the drift both of his Paper and of mine. We both agree, and every thoughtful person must feel, that it is not enough to say, with M. Guizot, that "civilization is a fact:" we require to know its probable origin, *i. e.*, we want to know what kind of a being the primitive man really was. On that point, however, the distinguished baronet and myself are diametrically opposed. He is a professed Darwinian, and does not believe in the special creation of man, but thinks he was developed by some imaginary process, which the Darwinians, nevertheless, call "natural," from a monkey, first into some nondescript and undiscovered animal between an ape and a man, and from that into a savage, something like those we know do now exist, of the very lowest grade. On the contrary I believe that "God created man in His own image," "upright," "very good"; and that savages are degenerate and degraded but remote descendants of superior ancestors.

4. According to Sir John Lubbock, therefore, the origin of civilization is savagery. He thinks that man, little better than a brute originally, has raised himself from that low and savage condition to a state of civilization and superiority; and that it is the tendency of mankind thus to rise. I hold diametrically the reverse of all this: I believe that man was originally perfect, "made a little lower than the angels," and has fallen from that state of moral elevation; that civilization owes its existence to this original superiority of man, to the remains of it in the oldest civilized races, and to its revival and recovery in those races which had degenerated; and that unfortunately it is rather the tendency of mankind to degenerate and to fall from better to worse, than to rise and elevate themselves from a savage or barbarous condition.

5. Now I contend, that apart altogether from what is revealed in Holy Scripture as to man's creation and his fall, the view I maintain is the only one consistent with all our experience, with all our positive knowledge of mankind, with all the history of the past that can be relied on, and with all the unquestionable facts of nature with which we are acquainted. I contend, further, that the view entertained by Sir John Lubbock is in the teeth of all such facts and history and knowledge and experience; that the arguments with which he supports his view are weak and illogical; and that he has shrunk besides from looking all the facts in the face, and from meeting arguments which he was aware had been advanced

upon the other side. I, moreover, allege that the few and meagre facts he does adduce as telling in his favour, are in reality against him, even taking them as they are stated by himself.

6. This is no question, then, for a compromise, or one as to which there need be any doubt. One side is fairly entitled to claim the victory, and to have it honestly awarded. The problem has but one solution, patent to the common sense of mankind. So much so, indeed, that it appears to me that the modern archæological pursuit after some fancied missing link between men and brutes, with the view of achieving for civilized man a savage and pithecoïd ancestry, can only be regarded as the temporary aberration of a mind-strained errant science or insane philosophy, but which, of course, very naturally thinks all the world mad, or blind and dull, except itself. Not that it wants altogether some kind of foundation. Even Don Quixote did not originate knight-errantry; nor was his extravagance without some kind of precedent. He only "bettered his instruction." And so do the modern Darwinians. Before the present transmutation champions entered the field, we had the *Vestiges* of an unknown knight traversing "creation," and his theory of "evolution with design." There was also, before him, the ancestral Darwin, with "the loves of the plants" upon his banner; Lamarck with a duck's feet reversed and the goose's neck displayed, stretched out to the dimensions of a swan's; and the crack-brained Lord Monboddo exhibiting his sedentary monkeys rubbing off their tails, and (like Professor Huxley in our own day) even proud of this new-found ancestry. Their theories and reasonings have passed away; and we could not expect to have just the same abandoned ideas all over again, without some formal alterations, in addition to furbishing up the old weapons and armour. For as Mr. Gathorne Hardy said in the House of Commons last month:—

"Scientific men arise with new so-called discoveries, which are done away afterwards by others, while these in their turn are swept away; but when these new discoveries become old and new ones arise, these men do not say, 'What fools we have been'; nor do they ever apologize for their errors, based upon the discoveries which have so completely failed to support them."*

* He adds: "Every man seems wanting to teach, and the only checks are those sound old foundations which at all events have antiquity on their side, and have union with the whole of Christendom, against those men who would by their so-called discoveries hastily upset everything which comes into collision with them. I do not wish in any way to check the advance of science and inquiry, but I desire people to wait a little, and not teach us so rapidly that all we have learnt is bad, and that all they have to tell us is good."—*Vide the Times* of 24th May, 1870.

And so, Mr. Charles Darwin and Mr. Alfred Wallace, in reviving the theory of transmutation, declare they have found out that all existing forms of living beings are but results of a so-called "law of natural selection." And every philosopher who has "fallen in love" with this new scientific damsel, compassionating her "struggle for existence," like a true knight-errant "loves and rides away," of course to the maiden's rescue in her youthful difficulties. First, Mr. Darwin himself, trembling for the safety of this Dulcinea of his own fancy, gallops off somewhat unexpectedly, his lance a little out of rest, and protected with a "braw an' new"* shield, which bears upon it the ominous new-fangled motto "*Pangenesi*s." While close upon his heels comes scampering fast his black and doughty squire, Professor Huxley, with arms, carbon—the modern for "sable,"—a nettle vert, barbed and seeded; for Supporters—Dexter, a demi-man coupé and affrontée sa.; sinister, a monkey rampant, with tail nyllée, hands and feet counter-changed, "all ppr."; and waving wildly to and fro over all the flora and fauna of the globe, a long new-painted banner, with an endless scroll, inscribed with the single word "*Protoplasm*." Sir John Lubbock next enters the lists; but he does not follow the old-fashioned modes of warfare. He bears no shield nor banner, and appears chiefly to rely for victory in his wager of battle, on behalf of the evolution of civilized men out of apes and savages, upon a heavy supply of chipped flints, carried in large saddle-bags, and a remarkable kind of boomerang, which appears but a home-made and unskilled copy of the very effective weapon of the aboriginal savages of Australia.

7. It is with Sir John Lubbock we have now chiefly to do. Let us, therefore, proceed to the consideration of his paper. He thus opens the question:—

"Side by side with the different opinions whether man constitutes one of many species, there are two opposite views as to the primitive condition of the first men, or first beings worthy to be so called.

"Many writers have considered that man was at first a mere savage, and that our history has on the whole been a steady progress towards civilization, though at times, and at some times for centuries, some races have been stationary, or even have retrograded. Other authors, of no less eminence, have taken a diametrically opposite view. According to them, man was, from the commencement, pretty much what he is at present;

* I introduce this apposite Scotticism, in order to observe incidentally, that it appears to be the primitive form and proper original of a still common expression which has first been developed into "bran new," and more recently transmuted into "brand new," by some one evidently under bottle-inspiration!

if possible, even more ignorant of the arts and sciences than now, but with mental qualities not inferior to our own. Savages they consider to be the degenerate descendants of far superior ancestors."

8. It will be observed that Sir John but slightly glances at the "missing link" between men and apes, in the allusion which he makes "to the *primitive* condition of the *first* men, or *beings worthy to be so called*;" and he only ventures to join issue upon the somewhat less monstrous proposition, "that man was at first a mere savage." This at least evidences some discretion; but it cannot be regarded as, in the best sense, very valorous, if we consider that Sir John Lubbock not long ago avowed himself "an humble disciple of Mr. Darwin's," and "ventured to claim for that gentleman's theory, that it is the only one which accounted in any way for the origin of man; for" (he adds) "all the other theories were, in his judgment, no theories at all, but simply confessions of ignorance, and did not carry those definite ideas to the mind which were conveyed by the theory of Mr. Darwin." *

9. Such were Sir John Lubbock's words at Nottingham on 25th August, 1866, when I read my paper "On the various Theories of Man's Past and Present Condition." In it I had said: "The difficulties of Darwinism begin long before we have got to man,"—inasmuch "as Darwinism begins with a human infant which had not human parents. But long before we arrive at that development under this theory, we are forced to ask, in our endeavour to realize what it professes to explain, 'How possibly the first young mammal was nourished in its struggle for existence, if its immediate progenitor was not a mammal?'" Nay, "passing over that, with all other difficulties which lie against Darwinism long before we come to its application to the origin of man," I also pointed out, that "to this physiological difficulty there is added one that is psychological; for, even if we see no difficulty as to the physical rearing and training of the first human baby which some favoured ape brought forth, we are forced to ask the transmutationist to favour us with some hint of the educational secret by which monkeys trained and elevated their progeny into men, when we ourselves are scarcely able, with all our enlightenment and educational efforts, to prevent our masses falling back to a state rather akin to that of monkeys and brutes."

10. Apparently Sir John Lubbock had intended to clear away and explain all these difficulties, by the "definite ideas" which he then professed Darwinism conveyed to his mind. But unfortunately he has failed to do so. He has not even attempted

* *Journ. of Trans. of Vict. Inst.*, vol. i. p. 216.

it. And as he had heard my challenge, and seemed boldly to take it up, I can but attribute the subsequent oozing away of his courage to the pithy remarks of the late venerable President of the Ethnological Society, Mr. John Crawford, who thus delivered himself immediately after Sir John Lubbock had spoken upon the occasion referred to. Mr. Crawford said—

“For his part he could not believe one word of Darwin’s theory. . . . It was a surprising thing to him that men of talent should nail themselves to such a belief. Man, it was said, was derived from a monkey. From what monkey? (Laughter.) There were two or three hundred kinds of monkeys, and the biggest monkey, namely, the gorilla, was the biggest brute. (Laughter.) Then there were monkeys with tails, and monkeys without tails, but curiously enough those which had no tails, and were consequently most like man, were the stupidest of all. (Laughter.)”

11. In Sir John Lubbock’s paper, read just a year after this, we need not wonder that he did not risk breaking a lance for any of these monkeys. They may be considered as laughed off the field; or, in racing parlance, as “scratched” by Sir John himself. So let us now proceed to witness the fight he does essay to make on behalf of his supposed ancestral savages. In the first place I must point out that he does not state very accurately the views of his opponents. He says, “according to them, *man was, from the commencement, pretty much what he is at present; if possible, even more ignorant of the arts and sciences than now*, but with mental qualities not inferior to our own.” The words I have emphasised by italics do not express opinions that could be entertained by any one who gives the matter five minutes’ thought. At all events, those who believe that man was created “upright” and “very good,” do not believe he was from the commencement pretty much what he is at present. And no one can imagine that man could possibly when first created be anything else than totally ignorant of all arts and sciences, which are human inventions and discoveries that could only be arrived at in time by his ingenuity and experience. We must believe and know, with Solomon, that although “God created man upright,” man himself must “have searched out his many inventions.”* And in these words we have a hint of the important distinction I wish you hereafter to consider, between “moral and material civilization,” as expressed in the title of this paper. Sir John, however, I doubt not, had no intention of mis-stating his opponents’ case; and he correctly adds, “Savages they consider to be the degenerate descendants of far superior ancestors.”

* Eccles. vii. 29.

12. I have already said that the eminent baronet's mode of literary warfare is not quite knightly. Having thus stated the issues, he straightway chooses for his adversary the deceased Archbishop Whately! This he does upon the plea, that "of the recent supporters of the theory" he opposes, "the late Archbishop of Dublin was amongst the most eminent." Which may be very true; but then, after all, according to the true proverb, "a living dog is better than a dead lion." And it seems not a little absurd to witness the living young Sir John Lubbock thus interrogating with an air of triumph the departed great Church dignitary:—

"What kind of monument would the Archbishop accept as proving that the people which made it had been originally savage? that they had raised themselves, and never been influenced by strangers of a superior race?"

Getting no answer, of course, he a little afterwards declares that the late great logician's "argument, if good at all, is good against his own view," and "like an Australian boomerang, which recoils upon its owner." Thus, in a breath, we have Whately's logic quoted at a lamentable discount, and an equally unheard-of character given to the Australian boomerang, which even the Australian savages themselves would only grin at and repudiate. Even savages know better than to use a weapon "which recoils upon its owner"! To give the very lowest and darkest races their due, at least they know how to fight!

13. Before quitting this incidental point—and since the dead Archbishop cannot reply to his living cross-questioner—let me observe, that in the boomerang we have just such a "monument" as proves that the Australian's ancestors were superior to the present race, that is, if we suppose the boomerang to be an Australian invention. For the present race, though they know how to form it by tradition, and know its use, are incapable of inventing anything of the kind or of understanding the principle of its action, which appears to have even puzzled Sir John Lubbock, and which perhaps few of our own mathematicians or scientific mechanics could satisfactorily explain. Either this, or the old aborigines of Australia had former communications with some higher race, from whom they obtained the boomerang (which is said to be recognized upon Egyptian sculptures); and either hypothesis tells utterly against Sir John Lubbock's theory of savage self-advancement. Sir John does not attempt to account for the boomerang upon his own hypothesis. He will never be able to do so; but at least he ought to try, and not be content with misunderstanding its use, and giving it an undeserved character, analogous to his denunciation of Dr. Whately's logic.

14. Here is another passage of arms between the living knight and the eminent but deceased logician. Sir John says :—

“In another passage, Archbishop Whately quotes with approbation a passage from President Smith, of the college of New Jersey, who says that man, ‘cast out an orphan of nature, naked and helpless, into the savage forest, must have perished before he could have learned how to supply his most immediate and urgent wants. Suppose him to have been created, or to have started into being, one knows not how, in the full strength of his bodily powers, how long must it have been before he could have known the proper use of his limbs, or how to apply them to climb the tree,’ &c., &c. Exactly the same, however, [adds Sir John] might be said of the gorilla or the chimpanzee, which certainly are not the degraded descendants of civilized ancestors.”

15. Now here we have a questionable and carelessly constructed argument quoted at third hand, but to say the least, quite as questionably and carelessly answered. One can gather the meaning of the argument quoted by the late Archbishop, even as it is cited by Sir John Lubbock. But it contains an odd mixture of ideas. If we believe man to have been created, then we should not speak of him as “starting into being, one knows not how.” That is the language of the other side; and no end of absurdities may follow the imaginary deductions from such an unrealized conception. If such language were advanced as regards anything else than modern science, it would be characterized as downright nonsense. Again, if the first man was created “in the *full strength* of his bodily powers,” he would also—unless he was merely an idiot, or some nondescript, non-intelligent being, with neither the reason of a man nor the instinct of a brute—have soon “known the proper use of his limbs.” It is the easiest thing in the world to select such ill-conceived arguments as these, culled from an author who is out of the way and cannot explain them, in order to show how inconclusive they are. But in fact Sir John Lubbock actually quotes these lame arguments in order to borrow them, and he even adds to their lameness. He thinks it enough to argue in reply, “Exactly *the same*, however, *might* be said of the gorilla or the chimpanzee, which certainly are not the degraded descendants of civilized ancestors.” The “same” *might*, indeed, “be said,” but could only be foolishly said, of men and monkeys. But no man who claims to be rational is entitled to say that even a gorilla or chimpanzee may have “started into being one knows not how.” It would be far less irrational to conceive that a stone or any other inanimate thing could have started into being without a Creator,—for that is the meaning of the phrase, “one

knows not how." Only crass ignorance or rank superstition could ever entertain such a notion:—it is worthy only of the old idolators of stocks and stones! Reasoning and enlightened man has always known that all the phenomena of nature must have had an uncaused First Cause. To go back from that, is to take the first step downwards towards ignorant savagery. But when we perceive that there must have been a first creation of all things by an invisible and eternal Deity, then all these conjectural difficulties vanish. Admit creation and Deity, however, and the "same things" cannot with any truth be said of the supposed first man and the first gorilla. Low in the animal scale as the gorilla is, it still has—like all other animals—what we call "instinct," by which it is enabled to live and supply its own wants. It is even "perfect" in its way, and it does not lose its instinct, though it does not acquire any others or advance. Man is not in the least like this. And if he is supposed, for argument's sake, to have been created in a low and savage condition, with little or no enlightenment or rational understanding—which is what the late Archbishop and President Smith were arguing,—then, not having the instinct of an animal, "if cast out helpless and naked," *thus*, "into the savage forest, he must doubtless have perished before he could have learned to supply his most immediate and urgent wants." But for the sake of argument let us even suppose that man in such circumstances might have survived, and then consider, what are the facts or other grounds for supposing he could have elevated himself and emerged from such an abject condition.

16. I now propose to state these facts and arguments as advanced by Sir John Lubbock. When his Paper was announced I made a point of being present in the Ethnological Society when it was read; and being then invited by the President, Mr. Crawford, to speak, I felt obliged to tell the author that I was disappointed he had not attempted to answer my arguments; and I then pledged myself to select his strongest points and reply to them in writing, and more fully than I could then do *vivâ voce*. I then observed, that in such a large question it was of no practical use for him or for me to go wandering over the whole history of the world, past and present, to gather a few doubtful facts here and there, that might serve to support our own views, and to disregard all other facts that would tell in a different direction, or—as he had also done—to ignore all the strongest arguments he had heard advanced upon the other side.

17. Sir John Lubbock says:—

"Firstly, I will endeavour to show that there are indications of progress even among savages;

"Secondly, that among the most civilized nations there are traces of original barbarism."

But before proceeding to attempt to establish either of these propositions, he introduces some illustrations which he thinks serve to support another proposition which he assumes to be true; namely, that it is improbable that any race of men would be likely to abandon or forget pursuits or arts which they or their ancestors once found useful or had known. Now I venture to think that that proposition is very far from undeniable; but, even granting it, I think we shall find, that the illustrations given by Sir John do not support it.

18. He says:—

"The Archbishop supposes that men were, from the beginning, herdsmen and cultivators, but we know the Australians, North and South Americans, and several other more or less savage races, living in countries eminently suited to our domestic animals and to the cultivation of cereals, were yet entirely ignorant both of the one and the other."

Then he argues that

"Were the present colonists of America or Australia to fall into such a state of barbarism, we should still find in those countries herds of wild cattle descended from those imported; and even if these were exterminated, still we should find their remains, whereas we know that not a single bone of the ox or of the domestic sheep has been found either in Australia* or in America."

The confusion of thought here is literally amazing. He speaks of the present colonists, but evidently of *future* herds of wild cattle; and while he uses the words that these "wild cattle" would be descendants from tame ones "*imported*," he forgets that all his argument topples down, if we but suppose the first civilized colonists to degenerate before such cattle were imported into the country. He seems to have no idea of colonization except of some Utopian kind, in which the colonists would always be able to take and always take with them the domestic animals and cereals to which they had been accus-

* But let me ask, are there any sedimentary strata in Australia in which any bones whatever have been found? (*Vide* Mr. Hopkins's paper, *Journ. of Trans. of Vict. Inst.*, vol. ii. p. 11.) And mark, Sir John argues here that this negative evidence is conclusive. The bones of these animals have not been found; ergo, they never existed there. And yet he, Sir Charles Lyell, and Mr. Darwin, in the absence of any bones of the "missing link," between man and apes, notwithstanding argue that as they *may* be found, so they believe in their probable existence!!

tomed. It might of course be very desirable to have such systematic colonization, in which the colonists would take with them every art and industry and all their domestic animals and plants to some other clime; but the thing we might almost say has never happened! "Colonists," moreover, did not originally migrate *per saltum*, or sail as now, from the north temperate to the south temperate zone. In the absence of the art of navigation, they went naturally by slow degrees farther and farther south; they had to pass through the tropics; and the introduction of cereals and domestic animals eminently suited for Australia, and even for North as well as South America, was not only as a matter of fact, but (as far as we know) *necessarily* gradual and subsequent to the original human colonization. But "colonization" itself is not the original kind of migration by which we can suppose the primitive men were dispersed over the face of the earth. Colonization, so to say, is a civilized mode of "dispersion"; but even to accomplish it, we know that explorers must go first, and sometimes no "colonists" ever follow. But even when they do, we also know—especially the more distant the colony—that with all our modern appliances for transport, which no ancient people could *possibly* have possessed, the cereals and domestic animals of the mother-country are only by very slow degrees introduced, with more or less success, and sometimes very long after the colonization has taken place.

19. Sir John goes on:—

"The same argument applies to the horse, *as* the first horse of South America does not belong to the domestic race."

What the precise intended value of the word "*as*" is, which I have italicised in this quotation, I confess I cannot perceive. Whately, could he now speak, would I think easily show that it involves a *non sequitur*, even were Sir John right in his "fact" as to the horse of the Pampas. But I believe he is egregiously wrong, and at issue with all scientific men. Let me contrast both his facts and arguments with a citation from the admirable work of the late Professor Waitz of Marburg:—

"A nomadic pastoral life cannot be considered as an advance compared with a fishing or hunting life. The Hottentots were in possession of numerous flocks and herds when the Europeans first visited their country; and the Kaffirs are a pastoral people to this day. Cattle-breeding does not necessarily lead to a settled life, though it is compatible with it, and renders it more secure if combined with agriculture. It is on this combination that progressive civilization depends; separately they effect but little. Here it may be right to mention that in the whole of America, Peru alone, at an early period, had domesticated animals, namely, the llama

and alpaca, whilst of edible plants it possessed the potato and the quinoa. With the exception of Peru, pastoral life could not prevail in the New World, the want of which, as Humboldt has shown, exercised a decisive influence on the civilization of the inhabitants. The dog was much used as a beast of burden, and its influence on the mode of life of the natives was unimportant. *Even the horse, which the Europeans introduced into the Northern and Southern Continent, has proved ineffectual in America as a means of civilization; showing plainly that the effect produced by the most important domestic animals depends on the mode of life and the degree of cultivation which the people had then already acquired. The buffalo chase without the horse must be more difficult and less productive, as the buffaloes are gregarious, and swiftness is more requisite than craft. Little apt for breeding in general, the American has not used the horse for such a purpose: he catches it according to his requirements, so that this animal merely contributed in inducing him to continue a hunting life."* *

20. As a translation of Professor Waitz's valuable work on Anthropology was published in London in 1863, and Sir John Lubbock's essay was written in 1867, I cannot account for his ignoring such writing as this, and such an author, and choosing a work of Dr. Whately's to which to reply. I have never seen Dr. Whately's book, and in all the discussions on this subject in which I have taken part from 1863, I never even heard Whately's name once mentioned till Sir John Lubbock exhumed him for his antagonist. The study of anthropology can scarcely be said to have existed when Dr. Whately wrote, compared with what it has since become; and I find from Sir John Lubbock's Paper that the late Archbishop's arguments only occur in some incidental chapters in a work on *Political Economy*!

21. Had Sir John been able to show that "a single bone of the horse" had been discovered in South America in strata of greater antiquity than its discovery by Columbus, he then might have upset the facts and arguments of the distinguished Marburg Professor of Philosophy. But he apparently admits that "not a single bone has been found"; although he tags on to this, the irrelevant and erroneous statement, preceded by the equally irrelevant "as," that the "first horse of South America does *not* belong to the domestic race"!

22. Though it lengthens this paper, I must make allusion to one or two other of Sir John Lubbock's illustrations. He says:—

"Moreover, this argument applies to several other arts and instruments. I will mention only two, though several others might be brought forward.

* Waitz: *Introd. to Anthropol.*, pp. 337, 338. (London: Longmans, 1863.)

The art of spinning and the use of the bow are quite unknown to many races of savages, and yet would hardly be likely to have been abandoned when once known."

This is surely extraordinary reasoning. It assumes that all the people of a race know all their arts; and that arts may be preserved without the means of perpetuating them. Spinning, for instance, *was*, for I can scarcely now say *is*, known in this country; but it was not necessarily known to every family; and migrations from our people might have taken place, and no doubt have actually taken place, of persons among whom spinning was quite unknown. But supposing they did know it once, but that the place to which they went did not furnish them with flax or other material for spinning, How soon would the art be forgotten? Why it is even all but forgotten among ourselves in its primitive form. And so, of the bow. A tribe who once knew its use might be driven out or migrate voluntarily from their native soil. They might go in peace, or have no necessity for the bow in the place in which they sojourned, or which they "colonized"; and if so, the use of the bow,—and in a few generations and with further dispersions, the very memory of it,—might easily perish. Unless it has been lately introduced as an amusement, I venture to say the British colonists both of America and Australia carried no specimens or even memories of the bow, once very well known in these islands, along with them. Tens of thousands of our people now know nothing of the bow, though of course its memory is preserved by means of books and a literature, which did not however exist among the primitive races and in the primeval times with which our argument is concerned.

23. But these are not the worst of Sir John Lubbock's arguments in support of this view. He further says:—

"The mental condition of savages seems also to me to speak strongly against the 'degrading' theory. Not only do the religions of the low races appear to be indigenous, but *according to almost universal testimony*,—that of merchants, philosophers, naval men, and missionaries alike,—there are *many* races of men who are altogether destitute of a religion. *The cases are, perhaps, less numerous than they are asserted to be; but some of them rest on good evidence.*"

The recklessness of the statement here made is extreme. What is first called "almost universal testimony," emphasised with the parenthesis that this means, that the testimony "of merchants, philosophers, naval men and missionaries alike," is to the effect that *many races of men* have no religion,—immediately is qualified and dwindles down to this, that

perhaps only *some* races are in that condition. Sir John very sensibly questions some of the modern testimony on this subject (and I may observe all the ancient testimony is the other way*); but then, why first cite it as testimony? He frankly lets out, however, how he feels the evidence *ought* to go! for he adds:—

“Yet I feel it difficult to believe that any people, which once possessed a religion, would ever entirely lose it.”

All religions, it is to be observed, are here merely put on a level; and he continues:—

“Religion appeals so strongly to the hopes and fears of men, it takes so deep a hold on most minds, it is so great a consolation in times of sorrow and sickness, that I can hardly think any nation would ever abandon it altogether. Moreover, it produces a race of men who are interested in maintaining its influence and authority. Where, therefore, we find a race which is now ignorant of religion, I cannot but assume that it has always been so.”

I have not time upon this occasion to argue against this astounding assumption. I believe it will be felt to be contrary to the experience of all who hear me, even as regards true religion, whether respecting themselves, their children, or their less-instructed neighbours. If Sir John Lubbock’s experience is otherwise, and as he argues, he is certainly to be envied, unless he is under some strange delusion. He does not seem even to know of a “party” in our day who are eager to exclude the teaching of religion from the rising generation.

24. But I must ask, Are all religions alike? Do corrupt religions afford “consolation in times of sorrow and sickness”? Do they appeal “to the hopes of men”? And do all even who have been taught Christian doctrine, which does all this, desire to maintain it? Has Sir John Lubbock not heard of M. Comte, and the “Positive Philosophy”? Here, in this Institute, we have heard Mr. Austin Holyoake declare that he was taught Christianity by a pious Calvinistic mother. He is now an Atheist. Were he and his brother and Mr. Bradlaugh to migrate to some unoccupied region, would they not endeavour to abandon all teaching of religion? And what of its abandonment through sheer ignorance? What was discovered by Parliamentary inquiry about thirty years ago in our mining districts? What, in short, is in every man’s experience round about, who studies his fellow-men? Does it justify Sir John Lubbock’s assumption, or utterly refute it? I am sure I need

* *Vide Cicero, De Nat. Deor., i. 23; and Plutarch, Adv. Colot., in loc.*

scarcely reply, that it refutes it altogether. So I now pass on to his *quasi* facts in support of his views.

25. He says :—

“I will now proceed to mention a few cases in which some improvement does appear to have taken place. [1.] According to MacGillivray, the Australians of Port Essington, who, like all their fellow-countrymen, had formerly bark canoes only, have now completely abandoned them for others hollowed out of the trunk of a tree, *which they buy from the Malays*. [2.] The inhabitants of the Andaman Islands have *recently* introduced outriggers. [3.] The Bachapins, when visited by Burchell, had *just commenced* working iron. [4.] According to Burton, the Wajiji negroes have *recently learned* to make brass. [5.] In Tahiti, when visited by Capt. Cook, the largest morai, or burial-place, was that erected by the reigning Queen. The Tabitians also had then *very recently* abandoned the habit of cannibalism. [6.] Moreover, there are certain facts which speak for themselves. Some of the North American tribes cultivated the maize. Now the maize is a North American plant; and we have here, therefore, clear evidence of a step in advance made by these tribes. [7.] Again the Peruvians had domesticated the llama. Those who believe in the diversity of species of men, may endeavour to maintain that the Peruvians had domestic llamas from the beginning. . . . [8.] The bark-cloth of the the Polynesians is another case in point. [9.] Another very strong case is the boomerang of the Australians. This weapon is known to no other race of men—with one doubtful exception. We cannot look on it as a relic of primeval civilization, or it would not now be confined to one race only. The Australians cannot have learnt it from any civilized visitors for the same reason. It is, therefore, as it seems to me, exactly the case we want, and a clear proof of a step in advance,—a small one if you like, but still a step made by a people whom Archbishop Whately would certainly admit to be true savages.”

26. But now having got back to the boomerang and “exactly the case we want,” according to Sir John Lubbock, let us consider what is the true value of all those *quasi* facts, or instances of savage advancement. The proposition Sir John Lubbock had to establish is, that savages can civilize themselves, or, as he says, have actually made some steps towards improvement without instruction or example from higher races, *ab extra*. Now let us go over his examples and arguments in support of this. Their utter weakness will be manifest already to all who read this paper, merely from the words I have put in italics :—

(1.) The Australians of Port Essington *buy* improved canoes from the Malays; *therefore* they have advanced of themselves!

(2.) The Andamans have *recently* introduced outriggers. “Recently,”—after I know not how many millions of years of prior existence, Sir John Lubbock’s philosophy would assign to

them. But he does not say they have introduced outriggers before they had been visited again and again by races superior to themselves.

(3.) So the Bachapins had "just commenced" working iron. He does not tell us if without instruction; though

(4.) He does distinctly say the Wajiji had "recently *learned* to make brass."

(5.) I do not see the force of the statement as to the Queen's "largest morai" in Tahiti; and the "very recent abandonment of cannibalism" is left also unexplained. We may remember, however, recent instances in New Zealand, after cannibalism as we had imagined had been "abandoned," of its being reverted to upon occasion with considerable gusto. And as human flesh is not wholesome food, and "does not agree" with those who eat it, I am not surprised to find its consumption may vary and be easily given up for a time; but this can scarcely be regarded as any proof of a decided step from savagery.

(6.) "There are certain facts which speak for themselves. *Some* of the North American tribes cultivated the maize. Now the maize is a North American plant; and we have here, therefore, clear evidence of a step in advance made by these tribes." I would not weaken this easy-going argument by the least modification of the words. But, suppose we put the same facts, granting them, in this way:—The maize is a North American plant;—The first wanderers on American soil, accustomed to the cultivation of other cereals, found the maize indigenous and cultivated it;—*Some* of the descendants of these wanderers retained this knowledge and habit;—Others driven away to the forest or less genial regions, and subsisting chiefly by the chase, had no means of continuing the cultivation of the maize, and after a time lost the memory of its usefulness.—Is not this the more natural supposition, or, to say the least, is not the one argument as good as the other? "Nay, as the maize is a North American plant," and if advancement among savages is the rule, why should not *all* the North American tribes have cultivated it? Sir John does not hazard a reason. He does not seem even to have thought of this!

(7.) "The Peruvians had domesticated the llama." Let me ask, is not the llama "domestic" by nature? Has *any* wild animal ever been domesticated? It is very questionable;* and this is a point Sir John Lubbock does not discuss. I have omitted an admission which he here imagines the deceased Archbishop of Dublin would make,—saying, he "is sure" that the Archbishop would have made it! I can only say I am not sure; and that I must deprecate discussing in this way, *ad libitum*, the imputed opinions of a great thinker not now alive!

* Vide *Journ. of Trans. of Vict. Inst.*, vol. i. p. 410.

(8.) Then as to the bark-cloth of the Polynesians, I find no argument to answer. It is not even asserted to be a "recent" invention of the modern Polynesians. May it not be a traditional art-relic of their forefathers, and tell the other way?

(9.) And, once more, as to the boomerang. "We cannot" (says Sir John) "look on it as a relic of primeval civilization, or it would not now be confined to one race only." This argument betrays the source of all Sir John Lubbock's false reasoning throughout. By "civilization" he only conceives "material civilization";—he evidently imagines that those who believe that man must have been created in an elevated condition, "upright" and very good, also think he was created with a knowledge of all the arts and sciences! In fact he has not only been crushing a deceased logician of eminence, but belabouring a huge man of straw! It is almost the story of Don Quixote's windmills and wine-bags over again! The least amount of calmness and common sense dispels the illusions. As already argued (§ 13), the present Australian savages are incapable of inventing the boomerang. According to Sir John it has been invented by previous Australian aborigines. Surely the inevitable *ergo* is, that the ancestors of the present aborigines were superior to them. And if so, the Australian savages, as we now know them, are a "degraded" race. If there be another possible conclusion, I shall be glad if Sir John Lubbock will be good enough to state it.

27. Among the strong points he advances in support of his second proposition, that there are traces of original barbarism among the more civilized races, is the existence of "the traces of a stone age even in Palestine and in Syria, Egypt and India." But, granting this, there is the simple explanation, that to extract metals from the ore is not an obvious art or easy process, whereas stones are everywhere ready and at hand, and are easily converted into instruments by chipping and rubbing. It is most natural, therefore, especially for purposes of warfare, that slings and stones should have preceded bows and arrows, the long-bow the cross-bow, and the cross-bow the musket and rifle. But men might be quite as elevated morally and mentally while using the sling or the bow, as afterwards when using fire-arms. If "civilization" merely meant the outward development of all arts and sciences, it would be downright madness to apply the word to the primitive races of mankind. But that is not its meaning. It primarily and properly signifies an enlightened mental condition and pure morals or "good manners" among mankind.

28. Sir John Lubbock to some extent seems to feel this, for he next discusses the estimate of female virtue and the ideas of marriage among savages. I do not follow his arguments, however,

as to this, because they are so weak as to be scarcely tangible. But here is his own summary of them :—

“ Thus we can trace up, among races in different degrees of civilization, every step, from the treatment of woman as a mere chattel, to the sacred idea of matrimony as it exists among ourselves ; and we find clear evidence that the gradual change has been one of progress and not degradation.”

I cannot agree with this. And I fear the great change introduced by Christianity in this respect—of which Sir John Lubbock takes no notice—is scarcely now maintained. We need not point to Mormonism in illustration of a tendency to which Sir John Lubbock simply shut his eyes ; we can also find laxity enough in the present day very much nearer home.

29. Sir John next glances at arbitrary customs as proving unity of descent, and discusses at length an argument from the universality of certain superstitions connected with sneezing, advanced by the witty Judge Halliburton in the *Nova Scotian Institute of Natural Science*. Sir John then goes on, in opposition :—

“ To justify such a conclusion, the custom must be demonstrably arbitrary. The belief that two and two make four, *the division of the year into twelve months*, and similar coincidences, of course, *prove nothing* ; but I *very much doubt the existence of any universal, or even general, custom of a clearly arbitrary character.*” [The italics are mine.]

Strangely enough while thus writing, Sir John has himself actually named one such world-wide arbitrary custom, which in his eager pleading he overlooks. “ The division of the year into *twelve* months ” is purely arbitrary. There are thirteen months (or moons) in the year ; and yet the division into twelve is “ universal,” wherever there are traces of civilization. The custom is “ demonstrably arbitrary ” and “ therefore it justifies and proves the conclusion ” Sir John disputes !

30. In connection with that artificial and arbitrary division of the year, we have a cognate instance and a much more remarkable one of pure arbitrariness, in the mapping of the starry firmament into constellations of stars, grouped in connection with the imaginary figures of men and animals, and divided into the twelve signs of the zodiac. And this purely arbitrary custom is common to all the whole world where there is the least knowledge of astronomy retained. It is absolutely universal—common to Egypt, Assyria, Greece, China, India, Mexico ;—the figures, too, employed are almost everywhere identical, though in Central America there is most divergence in the actual figures—the least remains of this manifestly common tradition. As the sole or most probable key to this marvellous universal tradition and evidence of the common origin and antiquity of civilization, I must be content here to refer

to the remarkable book named *Mazzaroth, or the Constellations*, by the late Miss Frances Rolleston of Keswick,* to which I have more than once already referred in our discussions in this Institute.

31. Having now replied to Sir John Lubbock, I proceed to reconsider the subject briefly, in a somewhat more systematic manner. I take for my hypothesis and foundation of my argument, what has been revealed to us in Holy Scripture: that the Maker of all things is God; that all things animate and inanimate were created by Him, distinct as they are, and not evolved out of one another,—the heavens and the earth, the sea and all that in them is;—every plant of the field and all herbs; every fish and every fowl; every beast of the field and creeping thing; each after its kind; and last of all man, made “in the image of God,” “upright,” and “very good,” like all God’s other works. But it would be wrong to say that those who believe this, do so merely because it purports to be revealed. It is believed by them, also, because it commends itself to their conscience and understanding. Whether they could have arrived at the same conviction apart from revelation matters not, if so be they can now justify their faith by reason. In what follows here, all will be made to depend upon reason and analogies from nature; but it would be simply absurd and not very honest not to admit at the outset that our hypothesis is taken from the first book of Moses.

32. On the other hand we have another hypothesis to consider, which has been more than once broached to mankind, but which in its latest form comes before us from Mr. Charles Darwin, the eminent living naturalist. His theory is that man was not created, and that other animals and plants were not created distinctively as they now are, but were evolved from some primary creation—for the theory is not professedly Atheistic—of a few forms, or of one, into which life was first breathed by the Creator. The majority of men however understand this to be an Atheistic or a Pantheistic hypothesis; but some, and some even in this Institute, have taken other grounds, and consider it quite consistent with what is revealed of creation in Genesis. Be that also as it may, I reject the evolution theory, not merely because I consider it inconsistent with revelation; but because I find it to be improbable, irrational, and contrary to all the analogies and all our knowledge of nature.

33. Thus, then, the one theory comes before us as stated in the Scriptures, which purport to be the Word of God, on the authority of Moses. The other, as professedly found out in the world of nature, that is, as exhibited in the Works of God, on the authority of Mr. Darwin. I place the two thus in antithesis plainly, that all may understand the issues; not in order to prejudice the subject. Henceforth in this discussion, I desire to let both stand upon a

* Lond.: Rivingtons; a few copies on sale at 8, Adelphi Terrace.

level, and to bring both to the same common tests of reason, probability, analogy, and fact. *Fiat justitia, ruat cælum!* One may say this, as I do, with all reverence, without any apprehension that either the sky will fall, or that heavenly truth is in the least danger.

34. Darwinism, then, or "the law of natural selection," appears to me, *ab initio*, to be out of joint and at issue with all nature. It begins, merely with the things that have life,—unlike the more thorough evolution theories of the ancients, who began the world itself with an egg. Sir John Lubbock says it is "the only theory that accounts for the origin of man"; but man, as well as all other living beings, animal or vegetable, depend upon inanimate things for their subsistence; and unless our theory can account for the origin of all things it is valueless. Mr. Darwin speaks of "this planet cycling on according to the fixed law of gravity," whilst "endless forms most beautiful and most wonderful have been and are being evolved." But what as to the origin of this "fixed law of gravity," and of "this planet" itself, and of the air, and water, earth and fire,—taking either this ancient rude division of the elements, or their sixty-four chemical constituents, as discovered in modern times,—Are they evolved—fire from air, air from water, water from earth, or *vice versa*, or either from gravity? Or is carbon evolved from hydrogen, hydrogen from oxygen, oxygen from nitrogen, and so on through all the gaseous elements of the world? If not,—and what chemist or natural philosopher but would laugh at such an idea of the constitution of natural things;—if each of these elements has its nature or distinctive character, and measure and weight,—Is it natural or rational *à priori* to imagine, when we come to living beings, that they have a heterogeneous constitution, different from that of the other things by which they are actually nourished and kept alive?—that originally they all were muddled into one, and have evolved themselves into their present distinctive characteristics?

35. As rational and reasoning beings we must reject this, as at least *à priori* utterly improbable. But, of course, if we have *à posteriori* proof to the contrary, we shall be quite prepared to reconsider the matter. At present, however, the whole Darwinian theory, as the analogous theory of Lucretius was, is merely an *à priori* and unproved hypothesis; and so far, the *à priori* argument is against evolution. It is not even alleged by those who hold this theory, that gravitation, electricity, light, heat, cold, gases, air, water, earths or metals, were probably evolved one out of another. Only animals and plants! and not even them out of pre-existing elements, without the first *breathing of life* "by the Creator into a few forms or into one."* I am aware this passage has been removed from its place in the first edition of *The Origin*

* Darwin, *Origin of Species* (1st ed.), p. 525.

of *Species* by Mr. Darwin,—but I believe he has not ventured to expunge it altogether ; and in point of fact I do fairly state the case : he has *not*, like the ancient evolutionists, professed to evolve the whole world of being from an atom or egg.

36. Well then, my next argument is, that we cannot, as rational beings and natural philosophers, adopt an incongruous hypothesis, which would thus place the animate and inanimate world of being at issue. We must, therefore, reject Darwinism, with reference to the special subject now under consideration. And besides, I am not bound to argue here* against it further, in detail, inasmuch as Sir John Lubbock does not make the least attempt to break a lance in its favour.

37. I proceed, therefore, upon the other hypothesis, that just as the inanimate elements were not evolved out of one another, but always had the distinctive nature and characteristics they now have, ever since they had existence,—so the flora and fauna of creation have not been evolved, but have always had the distinctive characteristics they now have. But to save time I must pass altogether from plants to animals,—man being an animal, and as our search is for the closest natural analogies as to the original probable constitution of man.

38. As regards the inferior animals, therefore, what do we find, apart from quixotic speculation ?

“Just as there is no evolution, or ‘progress,’ or ‘future,’ for rocks, or metals, for trees or herbs or flowers, there is none for birds, insects, fishes, or quadrupeds. There are no essential changes in their constitution or character. What they ever were, they are, and ever shall be while they exist, so far as we have reason to believe. Insect architecture has not progressed or retrograded, like the architecture of man’s invention. Each kind of bee builds its own peculiar kind of cells ; they never learn or copy from one another ; nor do spiders ever copy from or work like bees. The nautilus of to-day has made no discovery in ocean navigation unknown to its ancient prototypes. Animal instinct is perfect in its sphere : it cannot be improved and it never deteriorates. Such is nature and its laws. But man is *not* subject to like conditions.” †

39. “*Not* subject to like conditions ! ”—then where, it may be asked, is the analogy ? To this I reply, that analogy does not mean identity ; and that I by no means wish to place man and the inferior animals in all respects upon a level. That would be quite as unnatural, it seems to me, as to evolve the one out of the other. The proposition I desire to establish from analogy is this—

* I have done so already in the Institute. Vide *Journ. of Trans.*, vol. I. p. 174, *et seq.*

† *Fresh Springs of Truth : a Vindication of the Essential Principles of Christianity*, p. 241. (London : Griffin & Co.)

the probable original perfection of man, from the perfection we find in the rest of the animate creation. It is neither my argument nor that of those whom I oppose, that man is now what he was originally. The question therefore is—having rejected the “ evolution theory ” for all living as well as for all inanimate nature—In what condition and with what character did man probably come from the hands of his Creator? He evidently somehow has changed, and he changes his character before our very eyes ; while the inferior animals do not so change, and apparently never have changed. If we found the mason-bee or carpenter-bee copying from one another, or endeavouring to rival the construction of the cells of the hive-bee, or the latter making the least advance or fresh discovery from generation to generation ; then we might by analogy reason that man had in like manner advanced from an inferior primitive state. But, it may be replied, that if man has not advanced he has degenerated ; and that this destroys the analogy between him and the other animals whose instincts and character thus remain unaltered. No doubt whatever it does. The analogy breaks off, and becomes an antithesis whenever we admit that man has changed. But that is not the question. We only desire to establish by analogy what was his probable *original* condition.

40. What I argue is, that as all nature has a beauty and perfection and fitness of its own, exhibited in every element, and in every plant, and every animal, save man ; we are bound from analogy to conclude,—man being now the exception to that rule,—that originally there was no such exception. We are bound from all analogy to argue, that as the ant, the bee, the spider, the beaver, the elephant, the dog, have each their peculiar and marvellous instincts and intelligence adapted to their nature and place in creation, so that man when originally created would surely in like manner come perfect from the hand of his Creator, with an intelligence and enlightened reason adapted to his superior place in the creation. If not, we should have a solecism in nature : in other words, it is unnatural and irrational to come to such a strange conclusion. But it is not only contrary to all we do know of nature, but it is derogatory to our conception of the character of the Creator, to conclude that He made man less perfect than the inferior creatures.

41. That man is now a solecism in the creation is, alas ! too true. Here is a picture of his present condition, which I drew six years ago :—

“ Nature is not for him a sufficient guide. He has no perfect instincts. Nature does not even clothe him, as it does the birds and beasts. His birth brings with it pain and sorrow and sickness unknown to the lower creation. His period of utter helplessness as an infant and child is long and protracted. If not carefully trained and taught and elevated, he degenerates. By his wilful acts he may demoralize himself, and often does, even after

he has been taught and practised better things. By his knowledge and reason and manifest superiority, he can subdue the earth, make the very elements subserve him, and has dominion over all other creatures. And yet he may, and often does, sink below the very brutes, through folly, intemperance and evil lusts. He wars with his own species, commits crimes so abominable that other men cannot name or think of them without a shudder ; and he brings upon himself diseases and inflictions utterly unknown to the lower order of creatures that live instinctively under nature's laws."

"If men point to civilization as the means of undoing these lamentable evils in man's condition, they must be reminded that civilization (in the ordinary sense) affords no effectual remedy. While it advances mankind, it often is the means also of their greater debasement. Our very present anxieties as to man's condition, have all been intensified, from the evils that have obtruded themselves upon us on every side, in the very midst of all our enlightenment and material civilization." Besides we must remember that "civilization may not only advance but may become stationary or even retrograde, and that moral amelioration by no means accompanies all material development ; that civilizations which once existed have afterwards disappeared ; that nations which have risen may fall." *

42. This brings us once more to the consideration of the difference between moral and material civilization. We are accustomed to the Latin poet's words :—

"Ingenuas didicisse fideliter artes
Emollit mores, nec sinit esse feros."

But there is a reflex interpretation of this sentiment that runs in our heads, as if it meant that it is the fine arts that soften the manners. For instance, a writer in the *Times* a few weeks ago, lamented the absence in modern Greece of "the ingenuous arts which mollify manners and do not suffer them to be savage." And there is some truth in this way of putting it,—there is a humanizing reaction of arts and of outward refinement upon men's minds and manners ; but it is a reaction. The direct influence is the other way. The gentle and refined soul first gives rise to the arts, and in fact creates them. Yet by habit we usually speak as if civilization only meant an artificial condition of things or an acquaintance more or less with the arts and conveniences of life. It will be seen that this idea runs through the whole of Sir John Lubbock's argument. It is, however, quite a mistake ; for, of course, in that sense, the primitive man, however perfect, nay the very angels themselves, could not be regarded as "civilized." But the word "civilization" has a proper and historical sense, besides this merely vulgar and conventional signification. It was primarily

* *Fresh Springs of Truth*, pp. 241, 242, and 243.

used as characterizing the inhabitants of cities, in contradistinction to the rude and unpolished boors or savages of the country plains or forests. The result of men's association in cities and communities was naturally progress in industrial arts and other inventions, attended with more polished and gentler manners, or moral elevation. Whereas the original dwellers in the country were hunters and freebooters. But in thus speaking we are really reversing the order of things, and confounding cause and effect. It is truer to say, that the persons of milder and gentler disposition naturally associated together forming peaceful communities, and building towns for their mutual protection and in order to pursue industrial arts; while those of a wilder disposition naturally separated and followed the chase, and thus acquired the habits of nomades or wanderers, degenerating occasionally into utter savagery. But, at any rate, there is not a doubt that the proper and natural meaning of the word "civilized" has reference to the moral characteristics of men, and not to the material adjuncts of civilization. And so, when a man, however outwardly civilized by the accidents of birth and association, commits some gross atrocity, we even now apply to him naturally the epithet "savage." Or again, take this description of the condition of parts of Greece at the present day, from a leading article in the *Times* of 16th May last, by way of illustration:—

"Where the first principles of society are wanting in a country, where law is an alien and civilization merely skin-deep, what can we expect to see in Greece but a land where there is neither agriculture nor trade, simply because the right of property is insecure and life itself uncertain? There are no roads, and consequently no means to dispose of local produce, and, to sum up all in the words of a great moralist, 'There are no arts, no letters, no society, and, what is worst of all, continual fear and danger of violent death, and the life of man solitary, poor, nasty, brutish and short.'"

43. But besides disregard of law and moral rectitude, and of the life and property of others, there is a still more potent source of the corruption of manners, which is perhaps the primary cause of all such lawlessness, and that is false religion. For religion underlies morals. So in Sir Henry Bulwer's speech on the Greek massacres, as reported in the *Times* of the 20th of May, we have this passage:—

"You see the assassin, his hands dripping with the blood of his innocent victim, visits his priest, and returns with perfect cordiality the recognition of him who directs his conscience."

There was too much of this very same thing in the Middle Ages in this country and throughout all Christendom. There is the same thing now in Ireland and in Italy and elsewhere under similar influences:—Savagery and blood-guiltiness in the midst of Civiliza-

tion, more shocking and more culpable in such circumstances than are the blind inhumanities of heathen savagedom !

44. But I must now sum up my conclusions briefly, leaving many of my propositions to stand by themselves without much further argument. First, then, I say that moral civilization is the only true civilization, and the only lasting foundation even for the highest material civilization. Secondly, I regard the bases of true moral civilization to be a right faith in God, with right notions of His holiness, justice, truth, and mercy. Thirdly, after that comes a knowledge of nature, or science, which is the basis of art ; for "knowledge is power ;" and what we call material civilization is its product. But after all, I might have given a shorter summary. I seem only to have expressed in other words two proverbs of Solomon : —the first—"The fear of the Lord is the beginning of wisdom, and to depart from evil that is understanding ;" the other—"Righteousness exalteth a nation ; but sin is a reproach to any people."

45. When false notions of Deity take the place of true, we have then more or less of superstition, descending to the grossest idolatries and the fetish-worship of savages. The result of such corruption of religion is moral corruption, and civilization becomes more and more corrupt, or is superseded by barbarism and savagery. Nations and races sink under all such influences, instead of being "exalted." We may take the whole history of the world, ancient and modern, and we shall find these canons exemplified. We may apply them even to families and individuals, and to the stages of our own moral history, and we shall find them to be generally and essentially true. And we should always remember, that in earlier ages, when traditions were mostly oral, and writing either not invented or but in rare use, the descent of a segregated family or tribe would often be most rapid, and the total loss of almost all traditions inevitable in a few generations.

46. Once more I must give a summary of conclusions, with occasionally but brief arguments. I deny evolution or development, either of the material elements one into another, or of dead matter into living things, or of plants into animals, or of the inferior animals into one another, or into man. While admitting variations and changes in living things within the limits of their kind and respective natures, I deny that such changes are developments upwards. They are rather the reverse. As Professor Dawson said in an admirable lecture on the Primitive Vegetation, delivered in the Royal Institution on May 27, "the first plants of a particular kind are, in fact, the noblest and grandest specimens," being brought forth as it were, when the material elements were in their pristine strength and richness ; "while even when they differ from cognate plants now existing, they are, nevertheless, all more or less upon a common principle or plan, that enables us to understand their character

from our knowledge of their existing representatives, and to see that there is but one intelligent plan of creation throughout the whole." And so it is with the inferior animals, as Hugh Miller, long ago pointed out, in his *Footprints of the Creator*. I conclude from analogy, therefore, that so it was also with man.

47. But how would the first man be endowed, according to this analogy? I reply, *First*, with the knowledge of God, for without it his existence would have been merely a puzzle. *Second*, with wisdom and understanding, or a rational mind of the highest conceivable powers, for man is a reasonable being. *Third*, I venture to think he would also be endowed with a gift of natural language, by which to think and speak. I quite admit that this is supposing that what I have called "natural language" was given to man supernaturally. But so was his very being. Creation is necessarily supernatural. Things properly are only "natural" after they and their nature exist. But a gift of this kind, suitable to a new-created, perfect, and reasonable man, appears to me to be a necessity for his nature; and, after all, it is in strict analogy with the endowments of the inferior animals. They are supernaturally endowed with natural instincts. I say supernaturally endowed, because their instincts are not acquired by any natural process, or by teaching or education. They are literally supernatural gifts.

48. Now, take this hypothesis as regards man's creation and his primitive condition; and suppose that male and female were created, thus perfect and thus endowed; and we have then an intelligible first proposition by which we can understand the whole future history of the human race. Without it, all is dark, unintelligible, and irrational. Man as an infant could not be naturally without human parents. If so created, as an infant, he could not have lived; or even were that possible, could only have lived untaught, ignorant, dumb,—unless we further suppose there had been a series of supernatural methods of nursing, training, and teaching him. Of course the grown man could not have been naturally either, unless he had first been a child. But, in fact, there is less of supernaturalism, less of the miraculous, in supposing him to have been created as a man, than as an infant. It appears to me the only rational supposition. I am therefore constrained to believe it; just as I am to believe in the existence of God, because it is impossible to believe that the things which appear around us exist without a Cause which is unseen.

49. But man is not now thus perfect, as we have assumed him to have been originally. And does this not destroy our argument and analogy? Not at all. We have other analogies and facts as to our nature and history to appeal to. We have plenty of instances of men once comparatively elevated sinking into degradation through vice, intemperance and other evil lusts. And though men may deny the

existence of the first created man, or Adam ; the coming of the Second Adam, "the Lord from Heaven," or the beginning of "the new creation," is an event in human history that is not very remote. *Christianity is a fact*, just as "civilization is a fact ;" and the history of modern civilization is little else than the history of Christianity.

50. He must be a poor anthropologist who would attempt to pursue "the noblest study of mankind" and leave out of consideration their religions. Now mark not only what Christianity has done and still is doing for humanity ; mark also its theory of man's origin and history and destiny, as propounded by its Divine Author. Its theory of the past is precisely what I have advocated,—that also of the old Hebrew Scriptures. Christ came as a "Restorer," and He made the true criterion of pure social life that which, He tells us, was "in the beginning," when "God created man, male and female," and of "these twain made one flesh." If, then, Sir John Lubbock desires the highest idea or theory of marriage, he has it in Christ's own words. But it is a theory not compatible with man's origin in a low and grovelling condition as a development out of some brute. According to Christ the perfect idea was first, and had its origin in God's own plan and man's creation. There is not a doubt, as all Christian moralists admit, that marriage is the foundation of society and therefore of civilized life. After the relaxation of the primitive law of God among the Jews, and the corruption of their morals, the burden of the old prophets was a constant cry against impurity, and the re-proclamation of the original sanctity of marriage, based upon the same high theory of its being a perfect union or oneness. And, "Wherefore one ?" asks the prophet Malachi ;* to which he also gives this reply : "That there might be a godly seed" or progeny, as the guarantee of a proper education "in the nurture and admonition of the Lord ;"—that is, in order to secure a true civilization.

51. Christ came also as "the Healer of the nations," and "to take away the sin of the world." Stretched out upon the cross of Calvary, He offered himself a Holy Sacrifice for the sins of the whole world. He died ; but the grave could not hold Him ! He ascended into heaven, to receive gifts of grace for man ; and He ever lives at God's right hand to make continual intercession for the weary and heavy laden with sin, and to give pardon to the penitent ! And all for what general purpose ? For the regeneration of humanity ; for the restoration, to all who will, of that uprightness and original perfection we have lost,—to accomplish, that is, in the very highest sense, nothing less than our CIVILIZATION.

52. But the process of amelioration is moral. Man's will is not

forcibly constrained, and the knowledge of God's truth must be handed down. Hence Christ's command to His first Apostles "to go and teach all nations." Hence the paramount importance of education. Hence the imperative obligation, upon all who have received the truth to teach the Truth. Hence the shameful disgrace to those who might have prevented it, when a people are either taught error, or left to "perish through lack of knowledge." "The times of men's ignorance" God now no longer winks at. And in days like these, when "knowledge is increased," when "men run to and fro," and the printing press speaks silently to millions through the eye, when the ear cannot be reached; all ignorance and all false teaching become doubly culpable, if we might have prevented the one or may have disseminated the other.

53. And yet, as we too well know, though Christ came and sowed the good seed of truth and purity in the world once more, an enemy hath also sowed tares. Evil and essential savagery cannot quite be rooted out from among us, with all our superior knowledge and all our modern civilization. We need not go to Africa, Australia, New Zealand or the Andaman Islands, for instances of human degradation. We need not to go far back in history or to pre-historic times, to hunt for the probable origin of human debasement. It is round about us here in England, and in our own day. We need not refer to Troppman and France, or to modern Greece, for recent instances of savage brutality. Nor even to pretentious Rome for a still more sickening picture of general moral corruption, so shocking that the writer in the *Guardian* newspaper who lately portrayed it, could not venture to write his account in plain English for the general eye, but veiled it in the sadly appropriate language of the Roman Church. We need but to look at home,—to Middlesex, to Buckinghamshire, to Westminster Hall, to Bow Street,—and to the English newspapers for a year or a single month, to understand how man can corrupt and debase himself, and to know what is the probable origin of human barbarism and savagery. *Facilis descensus Averni!* Even the heathen knew how easy it is for man to degenerate.

54. What, on the other hand, is the remedy, that can alone prevent the general debasement of society? The revival of better things; the recalling of man to duty, aided by timely education, and by the protection of wise laws, founded upon Christian Truth; for that is "the salt of the earth," which preserves it from utter corruption. But if Christianity is mainly concerned with the teaching of the higher truths which are of the essence of moral civilization, it is an utter mistake to suppose that it is in the least degree inimical to civilization in its outward material development. There have been fanatical interpreters of Scripture who, with a text and a doctrine misunderstood and exaggerated, have taught that

Christianity requires the social life to be what we could only call a kind of milder savagedom. But the age is now infested with a still more pernicious class of teachers, namely those who, rejecting Christianity altogether and disbelieving the Holy Scriptures, nevertheless also set themselves up as Bible interpreters. They pervert what Christianity teaches, in order to clear the ground for their own philosophies, although all that is good in the latter are merely barefaced plagiarisms from the teaching of Christ and the Scriptures. They pretend that Christianity is adverse to human advancement, and to the material progress which they chiefly identify with civilization.

55. Christianity has been vindicated from such slanders more than once already in the Victoria Institute, especially by Dr. Irons and Mr. Row.* Let me do it once more very briefly, by analogy, in keeping with the other arguments of this paper. We have God's holiness and righteousness proclaimed in His Holy Word and by our reason and the still small voice of conscience within us. But we have also the varied beauties of His outward creation exhibited to our eyes in all His works, in the glory of the heavens above and throughout this beauteous earth. In Christianity we have something analogous in the actual development of the fine arts in Christendom, in the revival of letters, and in the history of European civilization. But the gifts and teaching of nature and of grace may be alike perverted, abused and misapplied. There was no reproach, however, implied as regards the gorgeousness of the king's apparel, when our Lord declared that even Solomon in all his glory was not arrayed as superbly as the flowers of the field. Men did not know the marvellous literalness of this truth when it was taught by Christ. By the microscope we now understand it. When St. Peter teaches woman that the ornament of a meek and quiet spirit is the true adorning of the gentler sex, he is not forbidding all outward adorning of the plaiting of hair, and of wearing of gold, or of putting on of apparel. He is only telling them how unimportant or even paltry these are in themselves, and that they are at best but vain and ephemeral, while the other is incorruptible. When Christ tells us that the world will be engaged in the last days, and when He comes again, precisely "as in the days of Noah," when "they bought and sold and planted and builded," He is not condemning these employments, He is only condemning the careless godlessness of men and their want of true faith. To labour is the primary condition now of man's existence here. Without building and planting and commerce, how could "the state of the world be maintained?" † Without architecture, gar-

* *Journ. of Trans.*, vol. i. p. 73, *et seq.*; also vol. v. "On the Testimony of Philosophy to Christianity," § 87, *et seq.*—*Vide* also vol. i. p. 197.

† *Eccclus.* xxxviii. 34.

dening, sculpture, painting, the working in gold and silver, and the fine arts generally, (including even the curious working of gorgeous apparel and of ornaments,) as well as the more ordinary employments in the building of houses, agriculture, manufactures, and all the commoner works of necessity for man's comfort and even for his protection against the elements,—how many thousands or millions of individuals in every city and state would be left without honest labour and the means of subsistence? Some utilitarians are always thoughtlessly exclaiming, when they see some grand temple or church, or some ornamental monument erected in loving memory of departed worth and goodness, What a waste is here! Why not rather build a hospital? The answer to this may be brief. Were no such works undertaken to give various classes of men an elevating and honest employment, we should doubtless require to be constantly building hospitals! But after a time we should be unable to do that; for to neglect the culture of the peaceful arts of civilization, would be to take a retrograde step towards savagery, and would speedily extend among us both the idleness and poverty, with all their concomitant evils, of which we have only too much experience already.

56. This sketch would be incomplete, even as an outline, were I not to notice another great fact in man's history. *The Reformation is also a fact*, as much as is Civilization, or even as Christianity itself. We know what its fruits have hitherto been in the history of the world. It revived literature, gave a new birth to science and mechanical invention; and it has given to this country a glorious pre-eminence among the nations, for nobleness, generosity, freedom, and the general purity of social life. If we are not without our errors, we at least acknowledge them, and do not attempt to brazen them out with a lie. We mourn our lapses, our shortcomings, our unnecessary divisions, and we gladly recognize a growing "unity of spirit" and of charity among Protestant Christians. Let us go on then in this good work; ever again and again reforming ourselves, according to the purest primitive forms. Let us neither depart from the faith, nor dare to heap upon it human corruptions. For we may be assured of this, that the advancement of true Christianity is identical with that of Civilization,—of Civilization, both Moral and Material.

The CHAIRMAN.—I am sure we have listened with great interest to Mr. Reddie's exceedingly able paper, and I have no doubt that the discussion upon it will be very instructive and serviceable to us all.

Rev. J. H. TITCOMB.—I rise with diffidence, the more so because some years ago I had the honour of reading a paper before the Institute, "On the Antiquity of Civilization," and the discussion that followed was most inte-

resting. But let me begin by quoting a passage from Professor Max Müller, and I think it will fully bear out what Mr. Reddie has so well set forth in this paper; namely, that man in his primeval state, totally apart from material civilization, had that which was mentally and morally to be called true civilization. Max Müller says:—

“More and more the image of man, in whatever clime we meet him, rises before us noble and pure from the very beginning. As far as we can trace back the footsteps of man, even on the lowest strata of history, we see that the Divine gift of a sound humanity emerging slowly from the depths of an animal brutality can never be maintained again.”

That is the opinion of Professor Max Müller, no mean authority, especially in the department of which he is pre-eminently a master. The paper which we have had the pleasure of hearing most properly distinguishes between moral and material civilization, and I fully concur with Mr. Reddie in saying that that is the exact point at which Sir John Lubbock makes the radical mistake of his argument. And it is a mistake which is universally made on this interesting and important topic. Civilization is taken in some fictitious sense to be necessarily tied up with the later centuries of the world's history, and with those advances in the Arts and in the habits of life which are more or less identified with the word in our ordinary language. Civilization, as Mr. Reddie has shown, is sufficiently subserved if the being that possesses it is intelligent, clean, moral, honest, and honourable, even though he may have but little of the material elements of human progress about him. The question is whether, with such a starting-point of mental and moral civilization as we now predicate, a platform is not provided for man from which he necessarily evolves material civilization;—whether he, being originally not savage, but mentally and morally civilized, was in a state from which material civilization might be evolved. With regard to Sir John Lubbock's remarks as to the existence of a stone age antecedent to the metal age, I would say that that is not only consistent with the declarations of the Word of God, but it is not in itself in the least degree a proof that such a condition indicated a want of civilization, or even of material civilization. There is a remarkable passage in the book of Joshua which indicates the co-existence of civilization with a stone age. Joshua was told, “Make ye sharp knives,” and in the margin we have “knives of flints;” from which you see that there was a stone age existing with a metal age, and the existence of a stone age really is no proof that there was not in some sense a metal age remote or near. But putting that aside, I would point out that Sir John Lubbock may be right in saying that all Archæological and Ethical Science shows that the human race has greatly progressed from that state called the stone age, and yet, for all that, the stone age might not have been an uncivilized age. What have we in Scripture? I will not quote the words, but there were seven generations between Adam and the man who first invented metals. First there was Adam, then Cain, then Enoch, then Irad, then Mehujael, then Methusael, then Lamech, and then Tubal-cain. There were, therefore, seven distinct generations, which would give you more

than two centuries at our rate of longevity, but at a higher rate it would give you a much longer period. At all events the Scriptures show that the human race had existed for more than 200 years in a stone age without the invention of metals ; but that does not prove that in the period between Adam and Tubal-cain there was nothing but savagery. There is no need to suppose that, because the Scriptures prove otherwise. The pastoral character of Abel, the keeper of sheep, is anything but a savage one. But it is most important that we should see how the Scriptures are reconcilable with the existence of a universal stone age. If Adam was formed materially and morally in the image of God, he may have fallen in both respects from that original image ; but he took with him from Eden a sufficient amount of that high intellect with which he had been created, to enable his descendants in seven generations to evolve material civilization, so that musical instruments and working in brass and iron could be produced. I conceive that savagery has arisen out of a condition of things in which races similar to those separated from the rest had lost the remnants of the intelligence which they possessed at the time of separation, and so gradually sank down into degradation. I do think that the clear line of demarcation which Mr. Reddie has drawn between the conditions of civilization, as a starting-point, is the very crux of the whole question ; we solve the difficulty in this way ; and we then have a lever to work with, and all the elements and conditions of success for the whole argument. I believe with Archbishop Whately that the races which have fallen into a state of savagery never recover themselves. They fall into that condition which in the human body is represented by weakness, or want of recuperative power, when it is only by applying external medicines that it can regain the strength it has lost ; so savage races need the external forces of superior races to be inoculated with their knowledge and wisdom ; and it is only in that way that they can recover. That accounts for the outriggers of the Andamans, and evidences the progress they have made ; not as Sir John Lubbock argues, from internal or self-evolved sources, but *ab extra*. I look upon this paper as a valuable contribution towards our proceedings, and I trust the discussion may henceforth be continued in a different direction. I take much pleasure in the whole subject, for it is one of the highest importance in the present day, connected as it is with the antiquity of the human race and with that important question of ethnology in which Sir John Lubbock takes so deep an interest, and upon which he is now producing a new work. I trust that this paper will make us think more on the subject, and enable us to come better armed than we now are whenever we may have to discuss this subject again. (Cheers.)

Dr. E. HAUGHTON.—I think our thanks are due to Mr. Reddie not only for the valuable nature of his paper, but also for the moral courage he has shown in attacking such an adversary as Sir John Lubbock. (Hear, hear.) I have satisfied myself that Sir John Lubbock is one of the most cautious writers of that school which the Victoria Institute is specially engaged in opposing. In his work on *Primitive Man* he does not commit himself to many things which can be laid hold of, but there is a very objectionable tone

pervading it, and I look upon him not only as a very dangerous writer, but as one whom it is difficult to meet. I think, however, that Mr. Reddie has shown him to be wrong on many points. There is much in this paper with which I cordially agree, some with which I do not. For instance, in the 26th Section the author says :—

“And as human flesh is not wholesome food, and ‘does not agree’ with those who eat it, I am not surprised to find its consumption may vary, and be easily given up for a time; but this can scarcely be regarded as any proof of a decided step from savagery.”

Now, when a race of men, who have been in the habit of eating one another, give up that habit, I must say that it is a decided step from savagery. I can hardly think that such a habit would be given up because of human flesh being “unwholesome.” Cannibalism has been given up amongst the inhabitants of New Zealand, and it is said that those who have given it up consider it a gross insult to have it said that they would be capable of returning to it. No doubt that result has been brought about by the contact and influence of superior civilized Christian races.* Then in the same paragraph :—

“Let me ask, is not the llama ‘domestic’ by nature? Has any wild animal ever been domesticated?”

As soon as we domesticate an animal, the assumption is that it never was wild, and it becomes impossible to prove it either way, but the presumption ought to be more in favour of original wildness than original domestication. Another point in the paper to which I wish refer to is one which has frequently been before us—I mean Darwinism; but no allusion, that I am aware of, has ever yet been made to the fact that what is called Darwinism did not originate with Darwin. Mr. Reddie has, however, given a kind of hint of that in his 32nd Section, where he says :—

“On the other hand, we have another hypothesis to consider, which has been more than once broached to mankind, but which in its *latest* form comes before us from Mr. Charles Darwin, the eminent living naturalist. His theory is that man was not created; and that other animals and plants were not created distinctively as they now are, but were evolved from some primary creation—for the theory is not professedly Atheistic—of a few forms, or of one, into which life was first breathed by the Creator.”

Now this identical theory was published at least nine years before Darwin did so, by a Dr. M. Freke, of Dublin, in his work on “Organism.” His theory was this, that all living creatures “were evolved from some primary creation of a few forms, or of one, into which life was first breathed by the Creator.”

* A long residence at the Antipodes enables me to state that I have found this to be a fact. But natives have returned to cannibalism where the influences of civilization have been only partial and transient.—Ed.

The CHAIRMAN.—I understand that the leading theory of Darwin is the theory of natural selection. That which you have fixed upon is common to many authors besides Darwin.

Dr. HAUGHTON.—Perhaps I have not stated Dr. Freke's theory so fully as I ought. He considered that there was a primitive molecule, if you will, or one, perhaps more, atoms, from which all the rest of creation was successively evolved. I need scarce add that I do not desire to support this theory.

Rev. C. GRAHAM.—I do not rise to offer any opposition to the paper, but to express my agreement with its principles and reasoning. There are, however, one or two little things upon which I should like to say a word. Here is a quotation which Mr. Reddie has taken from Sir John Lubbock :—

“Where, therefore, we find a race which is now ignorant of religion, I cannot but assume that it has always been so.”

Now Mr. Moffatt found, in Southern Africa, certain races which were ignorant of Religion ; but among some of the old men he found still in use the word “Morimo,” which had been used by their forefathers to describe God, or the Great Spirit, but to which those who then used it attached no definite idea whatever. Here is another quotation from Sir John Lubbock :—

“The cases are perhaps less numerous than they are asserted to be, but according to almost universal testimony—that of merchants, philosophers, naval men, and missionaries alike—there are many races of men who are altogether destitute of a religion.”

It was generally believed in this country in the last generation that the natives of New South Wales had no distinct idea of the being of a God. But I have talked to one who spent twenty-three years amongst them, and he found that as a general rule they had a distinct idea of the being of a God, and some of them even gave the name which they said was generally applied to the one that they believed to be God, who lived up in the sky, and who, when they heard thunder, they believed to be engaged in conflict with his enemies. My friend endeavoured to reform them, and teach them Christianity, but he was much struck by this fact, that whenever it thundered they were particular to manifest by various noises their sympathy with their “Mika,” or God. That is a fact of very great moment. It is in direct contradiction to that statement made by Sir John Lubbock, and I think we shall find, after all, that there are very few races of men on record who have not the idea of a Supreme Being. (Hear, hear.) Now if we go for a moment to the question of polytheism I think it is quite clear that in the early ages of the world there was a general belief in the unity of God and a general conviction, that we express by monotheism. The early Fathers of the Church, in contending with the polytheists, quoted their own poets and their own philosophers against them. Lactantius speaks of the unity of the Greeks and Romans as proving the fact of the unity of God, and Aristotle was quoted to

show that there was one presiding mind which governed all things. Plato confirmed the testimony, and Cicero also believed that there was one supreme God. Any one who looks at Ovid's *Metamorphoses* will see that he affirms that God, and the better Nature, as he calls it, reduced the chaos to order. In the testimony of St. Paul we find the same truth. We find the apostle quoting the words of Aretus and Cleanthes : " For we are also His offspring," and he builds up the argument : " Forasmuch as we are the offspring of God, we ought not to think that the Godhead is like unto gold or silver or stone, graven by art and man's device." Paul plies the intelligent Athenians with the acknowledgment of their own poets that we are the offspring of God. Now whence was that idea derived ? I think it is quite clear that the knowledge of the unity of God was derived from the patriarchs. Methuselah was contemporaneous for two hundred years with Adam ; and Shem was contemporaneous with Methuselah for one hundred years, and with Abraham for one hundred and forty-eight years, according to what we regard as our best chronology, and it is quite obvious that the knowledge of creation and all that we regard as truth revealed in the opening chapters of Genesis, was easily transmitted to Abraham, and very well known by all the contemporaries of Abraham. It is quite clear that there is a perfect harmony between the statements of Holy Scripture and what we find acknowledged even by the Poets and Philosophers of Greece and Rome. There is just one other point, with regard to the decline and fall of the great nations of antiquity—Why is it that all the great nations of antiquity have passed away ? Why is it that Babylon has gone ? Why is it that the Medo-Persian empire, the Grecian empire, and the Roman empire have gone ? Why is it that the glory of Egypt has passed away ? All the ancient nationalities have perished—even the Jews themselves, with their high civilization, both moral and material, are all scattered over the face of the earth. Why is this ? Because of the fact of the universal degeneracy and the tendency of man to degenerate. The whole history of the nationalities of the world establishes the great principle that the tendency of man is to degenerate. It appears to me that the whole matter rests on the surest foundations, and the theory which we have to meet is very futile, and has not a single sound pillar to rest upon. (Cheers.)

The CHAIRMAN.—There is a visitor present who is very well acquainted with the history of those primeval ages to which reference has been made. Dr. Michell is practically and scientifically acquainted with the subject, and we shall be very glad if he will address a few words to us. (Hear, hear.)

Mr. W. D. MICHELL.—I will only say a few words in reference to the *first Stone Age* of which Sir John Lubbock speaks, and will only speak of an inquiry which occupied me for six or seven years, the results of which I thought it necessary to place before the British Association at Exeter. I admit there may be nothing very self-laudatory, yet when reasoning it is often very conclusive to be able to prove a negative : and seeing that the schools of Theology and the Scientific schools of Germany, France, and England were accepting the *first Stone Age*—the Palæolithic of Lyell and Lubbock—

as an absolute truth and as the proofs and evidences of an important stage in man's development, I came to look upon the matter as rather a serious question which ought to be taken up. The question was a very simple one. It was,—"Are these stones which have been found, and which have been made so much of, remarkable as giving genuine indications of human workmanship, or are they altogether natural?" It was, however, a question which required much examination; and what was the result? I challenged the opinion of chemists and mineralogists, divesting it for the moment of all the *archæological* and all the *geological* arguments. Here were certain Stones produced—take the beautiful collection in the Stone museum at Salisbury as an example—the question was, Were they so many actual proofs of the *great antiquity of man*, going back to the period of the Drift, which is unquestionably a period long ages ago. Were these specimens so produced authentic or not? After a long course of examination, extending over the valleys of England and France and of other countries, we could only come to the conclusion that these stones were naturally formed. I will tell you the mode in which we arrived at that conclusion. These stones are peculiar, and at first sight you would say, "They are artificially produced;" but when you see a graduated series of them, from the rough boulder slightly chipped, up to the very finest specimen, what is the result? Why, that they are only natural productions. There is the javelin-stone type, as well as those of the oval form or pattern; but they are found universally in every quarter of the world, and everywhere with the same typical form, on the mountain-tops, in the valley-beds, in the soil of the arable fields, along the coast of North Devon and Cornwall, and on Salisbury Plain. You can pick them up in these districts over an area of thirty miles, and they are of exactly the same form, whether found in the valleys of England, on the mountains of Lebanon, Syria, Arabia, or in the north of Europe; everywhere the same type is followed exactly. Of course the answer is, "They were made on the same plan everywhere:" but can we reason in that way, throwing overboard the fact that the very nature and chemical properties of the stone will naturally produce that form? Why should we bring in the savage? It seems to me that such a course is to abandon common sense or argument altogether. All these stones, flint chips, knives more especially, as I have already said, are typical in form, not only in their size and gradations, but even in their surface-markings. You can pick them up in London, indeed all through the valley of the Thames, and their form is the same as when you get them out of the Drift: they correspond exactly. They are, therefore, nothing more than natural stone curiosities. I have challenged chemists and mineralogists on the point, and I know that a large proportion of the mineralogists agree with me. This shows how cautious theologians ought to be before they accept new *facts* and dovetail them in with their reasonings. They ought to be sure as to what is really going on, and how much depends upon it. (Hear, hear.) The same thing applies to Darwinism. For myself, though I am not an able student of the theory, I see nothing in Darwinism but mere hypothesis, with nothing to support it. There is nothing that I know of as a naturalist which can account for and bridge over

those terrible cataclysms and great breaks in animal forms, with which we are acquainted. No doubt Mr. Darwin has done an immense amount of good in showing us the wonderful improvements that may be made in species, but he might have got a great deal of his information by going among the midland counties where many people could have shown him the wonderful power of breeding in altering and modifying species. That only shows the immense power and plasticity to be found within the species, but there is not an atom of evidence, as yet produced, to prove Darwin's own theory. I have heard Mr. Reddie's paper with very great pleasure, and I agree with the distinction he draws between material and moral civilization. They are quite different things and ought not to be mingled together. Unfortunately the term "civilization" is seldom defined in such an argument, and the word is used so diversely and in so many different ways by different men, that we are bound to have a definition before we can form any opinion upon it.

The CHAIRMAN.—I should like to ask you whether you have paid any attention to the facts and records in relation to the theory of a metal age. Have you investigated that at all?

Mr. W. D. MICHELL.—Merely cursorily as an archæologist, but I cannot say that I should like to give an opinion upon it now. I can say, however, with confidence that I have examined the *first Stone Age* since Sir Charles Lyell's publications, and have paid very great attention to it. There is really nothing in the so-called flint implements of the *first Stone Age* (the Palæolithic of Lyell and Lubbock), whether javelins or spearheads, ovals, flint knives, or any other typical forms of these, but a number of *lithological curiosities* formed according to the very nature and structure of flint. (Hear, hear.)

Rev. C. A. ROW.—In the Darwinian theory there is a most important point overlooked, and that is the enormous gap that there must be even between the last stage of the animal and the first stage of the man, where the one turns into the other. The animal is essentially unprogressive, while the very idea of a man gives us a notion of a great degree of progression and capability for advancement. Between the animal ancestor and the first human child, we know that there must have been a great gap. Animals move as it were in a very limited sphere, while man has in himself great, I had almost said indefinite, power of progression and advancement. Now this is a most important point, which has been very much overlooked. Our friends are in the habit of appealing to what we may call the dark ages, of which we have no historical records. In those ages you may theorize for ever on the few small historical memorials which remain. But why not view the question by the light of actual existing history? If we do that, it is quite plain it does not afford us the smallest foundation for believing that man is capable of advancing from an animal, as these theorists assert. Has man within the historical period increased in mental power or in bodily structure to such an extent as to lead us to believe that he is progressing towards a development into some higher being? (Hear, hear.) So far as I am aware, there is not an atom of evidence to induce us to believe that within the last 3,000 years man's body has improved in its actual type; and so far as history

bears its testimony, it is plain that man's mental power has not increased. Here comes in the distinction which has been so well laid down between man's material, and his moral and mental civilization. Of course material civilization is capable of large progression, because each generation takes up the discoveries which have been already made, and improves upon them. But no such thing occurs in mental or moral civilization. Our present degree of mental power, as shown by the present condition of man, does not exceed what it was 2,400 years ago. I apprehend that there is no community of human beings who have produced such an enormous quantity of great men in proportion to their number as the people inhabiting the small state of Athens. When we consider the number of great minds produced by a population of 20,000 Athenian citizens, we may well say that that population has produced far more great men than any similar population on the face of the globe. This is a strong indication that men have not made any progress towards developing themselves into beings of a higher mental power. If we survey the question still further, the argument is quite conclusive. Look at the general growth of nations in their civilization. So far as I have studied ancient history, I believe that mankind have developed their national civilization in a sort of ideal type. As an instance let me quote the Egyptian civilization, which was developed after a certain peculiar type, and when that type was realised the civilization stood still for some time, and afterwards made a retrogressive movement; and if you make the inquiry, you will find that this has been the fate of all the chief nations of the earth. The Assyrian nation would not be so good an instance, because it was destroyed by foreign conquest; but take the Chinese, and the Hindoos as an example. It is evident that their civilizations formed themselves on a certain type, and after they had realized that type it became to a certain extent stationary, and then retrogressed to its present form. Take the nation of Greece, in which civilization developed itself on the highest possible type of beauty, in poetry, in the fine arts, and in philosophy. If you look into the history of Greece, you will find that that development went on by slow and gradual changes until it realized a certain ideal. It then remained stationary for 200 or 300 years, and ultimately a retrogression set in. Perhaps it will be said that the modern Greeks are not the lineal descendants of the ancient Greeks. This is true to some extent, but you may trace the movement through a long succession of ages, and that is perhaps the most remarkable example that has ever appeared among mankind. You can easily apply the same principle to the Roman empire; but it would only be to go over the same ground. If any one will look into the history of these ancient nations, he will find that the principles I have laid down are substantially correct in every instance. Christianity in its action upon moral life has had a very remarkable influence, especially when embraced by young races. It did not impart fresh principles of civilization into either the old expiring Greek or Roman races;* but how long it prolonged their national existence I am not prepared to say. But

* Probably because not fully embraced.—Ed.

look at Christianity as embraced by the modern nations of Europe. There is no such tendency to decay in the civilization of those nations, as was always found in the civilization of the ancient nations prior to the birth of Christianity. Take, as an example, the French nation. It has passed through a very long period of history, and through a very great degree of corruption ; so that we might almost compare it with the Roman empire. But when that corruption set in in the Roman empire it never stopped, but the empire sank lower and lower until it expired with its civilization. France has been subject to great reactions, and a terrific explosion took place in the French Revolution ; but the principle of Christianity has been powerful enough to prevent the nation from expiring, and to set it going again with fresh national life. Look at Germany, with a national life extending over 1,500 years ; but yet there is not the least tendency to retrogression. Christianity, as embraced by the great Germanic races and the other nations of Europe, has tended to counteract the tendency towards national decay. (Cheers.)

The CHAIRMAN.—I have seldom listened to a paper with a stronger feeling of satisfaction and gratitude to the author than I have experienced on the present occasion. (Hear.) The paper is so unassailable in its general course of reasoning, and so complete in its general argument, that there is very little to oppose in it, and scarcely anything to add. Sir John Lubbock's arguments have been excellently met by Mr. Reddie to-night, and perhaps it may not be improper to mention that they have elsewhere been admirably met, so far as their general tendency is concerned, by the Duke of Argyll in his excellent book on *Primeval Man*, which contains a mine of searching thought and philosophical suggestion. There is only one thing in this paper in regard to which it appears to me that there is some room for doubt, if I rightly apprehend Mr. Reddie's argument. I have not been able to conclude that even savage races are utterly without the power of limited advancement ; but I believe that the range within which advancement is possible for them is exceedingly limited. I can hardly believe that any race of men could be so completely unmanned as to lose all power of combination for improvement, not in respect of moral or spiritual civilization, but in respect of a certain low-class material civilization ; I believe it will be found by a careful examination of the records and traditions of such material civilization as we ourselves have had access to, that there may be certain steps of progress for these races within certain very narrow limits. At the same time I cannot imagine that there can be anything whatever in this admission which is really in favour of Sir John Lubbock's argument, for I think the limits of that improvement are very small and very rigidly defined ; that just for the want of a moral inspiration and of a spiritual nobility ; just for the want of a revelation of light from without, a race has fallen down to the natural level of what we may call a mere animal, so far as man can ever become a mere animal ; and having fallen down to that level, they can just creep on and advance within very narrow limits up to a certain point, but they can never get beyond that point. I think that just thus far some modification may be necessary of the statement that all bar-

barous races are in a continual condition either of progressive decay and corruption or of stand-still. With regard to the question of the stone and metal age, Mr. Michell has given us some testimony which deserves to be very carefully and respectfully considered; but supposing we take the other view, I do not myself think that the fact of the existence of these stone implements proves that you must give to the existing human family a pedigree so degraded as that which some writers think the stone age tends to make probable. You must take into account the circumstances in which those races were placed which used such humble instruments, as has been done by Canon Kingsley in a little work called *Madam How and Lady Why*, which is one of the best and most Christian books of philosophy I have seen for some time. If you take into account the circumstances in which those races were, for them to have made such implements, for their aid and assistance, that of itself puts an immense and immeasurable distance between them and those supposed ancestors of theirs of whom some writers speak. Then there is another thing that I wonder no one has referred to to-night. I always feel ready to ask those who hold such views as those I have spoken of, "How is it that the process of development is, so far as we know, in the historical period, utterly and everywhere at an end? How is it that we do not see and cannot trace the steps by which the *simiæ* are advancing until they come to the condition of men? How is it, if this were so in the olden time, that all existing physiology goes to prove that it cannot and will not ever be so again?" (Hear, hear.) I do not think it agrees with the theory of development and progress to suppose that the powers of nature and the forces of the universe are slower and feebler now than they were in older and bygone ages. If they advanced in the past, why do they not do so now? If they performed such miracles in those ages which are beyond us, how is it they do not perform immensely greater miracles now?—for, according to the hypothesis with which we have to deal to-night, if the progress did go on from age to age and from generation to generation, the forces ought to gather strength as they proceed, and there ought to be greater miracles of expansion and development occurring continually now than ever did occur in those pre-historic times. (Hear, hear.)

Mr. Row.—I suppose they would say that the historic time is too short.

The CHAIRMAN.—But I do not think there is anything at all in that, because it has lasted some thousands of years, and there should be at least some traceable marks of progress which ought to be becoming more patent, more rapid, more powerful, and more swift from age to age. But we need not be at all alarmed in regard to this theory, for we all remember when positivism was beginning to make itself known twenty-five years ago, we were told that the development of religious conviction among the race had been, and could not but have been, first, fetishism, then polytheism, then monotheism, then, at a time of great enlightenment, pantheism, and in the final consummate days positivism. But when men came to look at the facts of the case and to bore back through the early strata of history, they found that this pretence was utterly against all the evidence and facts

of the case. The simple history of the development of the Brahmin religion utterly exploded, to all candid and well-informed people, the dream of which Theodore Parker and others in America had made so much some years ago. Looking at that Brahminical development, as it was to be seen at the time of the Aryan dispersion and a little before, we trace it through the Vedic hymns and literature, and we see that it was an elemental worship, which had nothing in the form of definite polytheism in it at all. The lie is, therefore, given to all these theories, and their supposed facts are exploded and dissipated. Just so we may expect that it will be in the case of those who hold the theory that from some strange and unimaginable degradation in the past the perfection of the present has arisen. (Hear, hear.)

MR. REDDIE.—I have to thank you all for the kindly way in which you have received this paper. As to the questionable point, whether some advancement might not be made by savages, I must state that this paper is supplemental to three others which I have had the honour of reading before the Institute, and to the very able and interesting paper of Mr. Titcomb,—not to mention some by other contributors—all of which have appeared in our *Journal of Transactions*. I therefore did not again go over the ground which had already been covered ; but in one of my former papers I quoted a passage on the subject from Professor Waitz's work, in which he points out that you can hardly get the savages to advance if you try : they seem to have no disposition to do so. But even if they did advance in the slight degree which our chairman has supposed, that would still not be advancement out of savagery into civilization, and it is upon that one point that the whole argument turns. I wrote this paper very hurriedly, and I had not time to refer to various authorities that I might otherwise have quoted, and I forgot, that in addition to Professor Dawson's testimony, we have Mr. Howard's valuable examination of the Darwinian theory (published, not under Mr. Howard's name, but as written by a Graduate of the University of Cambridge), besides similar testimony from Professor Rouse and Professor Goubert. This shows that the geological facts are against Darwinism. One remark I intended to make on the point taken up by Mr. Titcomb with regard to the stone age. We know that stones are easily got, and that metals are difficult to discover and work ; but at the same time we must not assent too much to the existence of a stone age. The probable contemporaneousness of metal and stone implements has, I think, been almost admitted by Sir John Lubbock himself, and we must remember that all metals would disappear through chemical action, and rust away, while stones would be left as tangible testimony. However, Mr. Michell, and his coadjutor in the south of England, Mr. N. Whitley, the Secretary of the Royal Institution of Cornwall, have done much to explode the stone age theory so far as it relates to the Drift. There is one thing which Mr. Michell did not state to you. He told you that these implements were found all over the country, but he did not tell you in what numbers. There are absolutely acres of them. I was one of the first to point out that these stones might have been used to throw from slings ; but if the whole world had been populated twice as

extensively, and if all the people had done nothing but throw stones at each other, there would not have been more of these stones than there are. (Laughter.) As to Dr. Haughton, he seemed to doubt whether human flesh was or was not wholesome food. I was referring to Mr. Pritchard's testimony in a memoir read before the Anthropological Society, which showed that this food did invariably disagree with those who ate it, and then they had to go to the medicine-man. Then as to the domestication of wild animals, Dr. Gray, of the British Museum, who is one of the best of living authorities on the subject, has said that he did not think a wild animal or plant had ever become domesticated. If Dr. Haughton can give us a case to the contrary, I will confess myself wrong. As to Dr. Freke's anticipation of Darwinism, the distinctive point of Darwinism is the theory of natural selection, which I have already shown to be as old as Lucretius. Even the modern protoplasm is not new, for the old theorists had a protoplasm from which everything was made out of mud. Mr. Graham's remarks are very valuable, but I have touched upon them in previous papers. The whole evidence is in favour of Mr. Graham and against Sir John Lubbock. With regard to Mr. Row's observation as to the great gap between men and animals—supposing the Darwinian theory to be true—the question has been discussed, and the Darwinians are very ingenious upon it. Mr. Wallace, the *alter ego* of Mr. Darwin, discussed the question before the Anthropological Society, and said that as man had reached such a high condition the law of natural selection did not apply to him.

The CHAIRMAN.—But does it not apply in the case of the monkey, which is developed into man? (Laughter.)

Mr. REDDIE.—It ceased after man was developed; and I remember a pertinent remark of Dr. Hunt's on the occasion I have alluded to. He said what a poor natural law it must be, if it was such that a man could thus entirely upset it. (Laughter.) It is contrary to all our notions of a natural law. As to the superiority of the Greeks to all other peoples, I should be inclined to question that. We have had the Greek literature well preserved for us; but if we had had the Sanscrit and older literature as well preserved, perhaps we might have found as large a proportion of able writers.

Mr. Row.—I said in any population of equal size.

Mr. REDDIE.—Well, if we had the same means of judging, the result might be the same. It has already been shown that three-fourths of the myths of the Greek historians were really copies from older works, and I would give credit to their originators as having the highest intellect. I would not even concede that there was not as great a proportion of intellectual power among the Hebrews as amongst the Greeks; and most certainly we must so conclude if entitled to reckon the wonderful poetry and precepts of the Holy Scriptures as we would estimate the merits of any other book. I have now only to thank you again for the kind attention which you have given to my paper and your very lenient criticism.

The Meeting was then adjourned.

ORDINARY MEETING, JANUARY 16, 1871.

THE REV. ROBINSON THORNTON, D.D., VICE-PRESIDENT,
IN THE CHAIR.

The Minutes of the last Meeting were read and confirmed.

MR. J. REDDIE.*—Before the Chairman calls upon Mr. Row to read his paper, I have to state that the Council has arranged for a series of "intermediate," in addition to the usual "ordinary," meetings. The first of the intermediate meetings will be held on the 30th of January, when the Rev. J. H. Titcomb will deliver a lecture on "Archæology, with some of its Parallels and Contrasts," illustrated with diagrams; and the subject will be so treated as to show its bearing upon various historical points which are interesting to us. As a rule, the papers read at these meetings are not to be printed in our Transactions, and therefore the discussions will not be reported.

THE CHAIRMAN. — Before calling on Mr. Row to read his paper "On Dr. Newman's Essay in Aid of a Grammar of Assent," I will trouble you with a word or two of my own. The campaign of the sceptics against Scriptural truth seems to have had a sort of lull. Those who have besieged the city of theology seem now to have signed a short truce. I believe I am right in saying that they have not discovered any new objection to the truth of the Scriptures, and that they seem to be working in their old groove. However, if they are not varying their mode of attack, they are at all events varying their places. Take, for instance, the country from which I came not twenty-four hours ago. I found the well-known Mr. Holyoake, who has lifted up his voice in this room on one or two occasions, and who I think, though I say it that should not, has been to a certain extent silenced here—I found that Mr. Holyoake had been lecturing at Perth and endeavouring to enlist a number of disciples, but I do not think he has succeeded in that view. I presumed on one occasion to point out that the logic of sceptics was very poor indeed; but the Scotch are so very logical a people that I do not believe the sceptics, unless they greatly improve, will ever make much progress with them. (Hear, hear.) But though there has been a lull among the sceptics, they varying their place rather than their matter, there is no reason why there

* The late.

should be a lull in our efforts. We have still our work before us, and we must not flag in that work. I am very glad to hear of the new plan which has been adopted for conducting our proceedings during the present session. I think the idea of alternating the discussions in the manner proposed is an extremely good one, for sometimes people would be very willing to bring out interesting points in a quiet unreported discussion, when they would not like to do so if they knew that all their observations appeared afterwards in print. I believe that valuable truths may be brought out in such discussions, and may afterwards be embodied by the speakers, in papers which will be very valuable to us—as valuable as any of those which we have already had before us. I now call on Mr. Row to read his paper.

*ON DR. NEWMAN'S ESSAY IN AID OF A GRAMMAR
OF ASSENT.* By the Rev. C. A. Row, M.A., M.V.I.

1. **T**HE name of Dr. Newman will probably suggest to many of my hearers that this Paper will participate largely in a theological character. I will therefore undeceive them at once. The treatise before me claims to be scientific. It is true, that theological questions are touched on in it, but, professedly, in a spirit purely philosophical. My own opinion is, that its philosophy is biassed by the theology of the author; but with his theology I shall have no concern. The author appeals to fact and to reason alone. Its principles extend over the whole range of human thought, and are fundamental to most important questions of philosophy, science, history, criticism, taste, theology, in fact, wherever a conviction about truth is possible. This is a sufficient reason why we should give them a careful consideration. The work consists of 485 pages, and I calculate that nearly 300 of these are purely philosophical. What adds greatly to the interest of Dr. Newman's work is, that he assisted Whately in the composition of his *Elements of Logic*. It may be considered as giving us the measure of the changes in his views on that subject, which forty-five years have made in the mind of the author.

2. The work bears a modest title: it is an *Essay in Aid of a Grammar of Assent*. It is therefore tentative only—a movement in the way of establishing a grammar of assent; but it makes no pretensions to be such a grammar. This is as it should be; for in the present state of our knowledge, all that can be done is to contribute some aid towards its creation. A great point will be gained if we can elaborate principles which may hereafter be erected into a system; or if the elabo-

ration of such a system be an impossibility, if we can succeed in consigning to the world of unrealities some portion of those erroneous methods of treatment which lead to all kinds of crudities in philosophy, science, history, and theology. There are many things in Dr. Newman's work which are worthy of the closest attention of all investigators of truth. They are well calculated to suggest caution in every department of human thought. It would afford me the most sincere pleasure if I could bring these most important points to your notice. The length of the work, however, renders this hopeless. In proportion as I value some portions of this work, I am the more jealous of various positions in it, which seem to me to be of a most questionable character. I must, therefore, devote this Paper to the comparatively unwelcome office of criticising those portions of it from which I dissent, rather than the points in which I cordially concur. My observations, therefore must not be construed into implying an unqualified disapprobation of the whole of Dr. Newman's work. I regret, however, to be obliged to express a deep conviction that its fundamental principles are both unusual and dangerous.

3. The central position taken by Dr. Newman is that, while all inference is conditional, every assent of the mind is absolute, and that assent, from the nature of the case, does not admit of degrees. The second portion of the seventh chapter is entitled "The Indefectibility of Certitude." He considers certitude to be a state of mind following assent; that it is absolute; and that to talk of degrees of certitude is absurd. If I apprehend him rightly, the point which he wishes to maintain is, that the mind can justly arrive at certitudes absolute and unconditional, when the premisses on which these certitudes rest justify a conclusion which is only probable. In one word, I understand him to assert that our beliefs may rise higher than their sources, and that we are entitled to entertain as strong convictions, nay, to embrace as certitudes, propositions which are incapable of being exhibited other than as bare probabilities to the understanding. This position seems to open a most serious question, and that it can only be maintained by confusing together things which differ widely.

4. In considering the nature of these operations of the mind through which we arrive at truth, I must ask your careful attention to the positions laid down in the fourth chapter as to the distinction between notional and real assents. Dr. Newman divides all our conceptions into two great classes, notional and real; and our assents into two corresponding classes, notional and real assents. Our no-

tional conceptions are those which are the pure creations of the mind, and which have no existence outside it; our real ones are those which we give to concrete things, which, however modified by the mind, have an objective existence. The logical intellect deals only with the notional conceptions of the mind; logical proof produces only notional assent. It is incapable of establishing any truth to which we yield a real assent, because the conceptions of the intellect are not capable of adequately measuring external realities. With these positions I agree to a certain extent; but I think that Dr. Newman goes too far when he excludes all real conceptions from the cognisance of the logical intellect. Our real conceptions are not and cannot be adequate measures of external realities, but of those realities as perceived by our own minds. The degree in which those realities correspond to our conceptions of them is a matter of inference only, or of our intuitive or instinctive beliefs. He is also of opinion that the processes of induction cannot be exhibited in any logical formula which is capable of being grasped by the understanding. In adopting this view he has abandoned the position taken by Whately, and, as far as the impossibility of exhibiting inductive reasoning in the form of the syllogism is concerned, I think rightly. But I cannot think that all efforts to evolve formulas which will aid us in detecting the imperfections of our mental processes must be abandoned. When, in the latter chapters of his work, he appears to lay down that the faculty which he designates "the illative sense," is the only means which we have of verifying our inductive processes, he appears to me essentially unsound, and dangerously to approximate to the assertion that to the individual truth is that which he throweth.

5. The examination into the nature of these notional and real assents occupies a very important place in Dr. Newman's system, and I must give it a brief consideration. The following passage will give a clear view of his distinction between things notional and real (p. 9):—"All things in the exterior world are unit and individual, and are nothing else; but the mind not only contemplates these unit realities as they exist, but has the gift, by an act of creation, to bring before it abstractions and generalizations which have no existence, no counterpart out of it." Here Dr. Newman seems to me to overlook the distinction between external things as they exist which are unit and individual, and the modification which they undergo when they become mental conceptions. It should be observed, however, that he admits the

possibility of our notional assents being converted into real ones.

6. Assent to a proposition implies that it must be intelligible. Without understanding what it means there can be no assent. When therefore he lays down that for a genuine assent the subject of a proposition may be utterly unintelligible, and the predicate needs only to be apprehended, he seems to me to lay down a position which is destructive of all rational conviction. When we say, for example, that "man is mortal," we assert the predicate of the subject; and I admit that it implies that we have a clearer apprehension of the predicate than the subject; still, I contend that we must have a comprehension of some kind of the subject. Dr. Newman gives, as his illustration, an assertion put into the mouth of a child, "lucern is medicago sativa." This, he most correctly says, is an assertion no better than the utterance of a parrot; for a child understands neither of these terms. But he adds, "if he is told lucern is food for cattle, and is shown cows grazing in a meadow, then, though he never saw lucern, and knows nothing about it, besides what he has learned from the predicate, he is in a position to make as genuine an assent to the proposition, on the word of his informant, as if he knew ever so much more about lucern." This I utterly deny. I would ask Dr. Newman, whether the act of showing the child the grazing cows does not convert the meaningless lucern into a word with meaning, though it may be an indefinite one. The child immediately associates the word "lucern" with the grass which he sees, and the word is no longer a pure blank. It seems to me that assent is impossible if we can attach no meaning whatever to the subject. I admit that there is no necessity for understanding both terms with equal clearness. The child in assenting to the proposition, "lucern is food for cattle," on the sight of the feeding cows, may not form a distinct conception of lucern, as distinct from grass or clover; but he forms an indefinite notion of it, as analogous to the grass which he sees. He conceives of it as a vegetable substance of some kind. At any rate, he can distinguish between it and a stone, or the letter x. Even when we use symbols we attach meanings to them very different from the utterances of a parrot. But Dr. Newman goes on to say that there are cases in which a child can give "an indirect assent to a proposition without understanding either subject or predicate. He cannot assent to the proposition itself, but he can assent to its truth." He cannot do more, says he, "than assert that lucern is medicago sativa, but he can assent to the proposition that lucern is medicago

sativa is true." I deny that the child assents at all in such a case. He believes in the general truthfulness of his mother, but it is absurd to say that he assents to the truth of the proposition if he comprehends neither of the terms "lucern" or "medicago sativa." To believe that one's mother speaks the truth, and to assent to every proposition which she utters are two things which differ widely. I can hardly think that Dr. Newman would have taken such a position unless he had felt himself compelled to do so by the exigencies of his theological system.

7. Although Dr. Newman lays down that assents do not admit of degree, at p. 40 he distinctly tells us that "there are assents so feeble and superficial that they are little more than assertions." He treats of them under the heads of profession, credence, opinion, presumption, and speculation. Under the first head, he places such cases as when a man calls himself a Tory or a Liberal; when he adopts, as a matter of course, the literary fashions of the day; the popular and reigning notions about poetry, music, novels, costume, or wines. He is not insensible of the difficulty in which the common language of mankind involves him; but he endeavours to evade it by saying that such opinions are assertions and not assents. He gives several instances of them which are very curious, and I subjoin them in a note.* "To say," he adds, "I do not understand a proposition, but I accept it on authority, is not formalism; it is not a direct assent to the proposition; still it is an assent to the authority which enunciates it." This seems to me to be an admission of what I strongly contend for, that such assents are not assents to the proposition itself, but to something else; just like a boy who learns his Euclid by heart, without the smallest comprehension of the proof.

8. Dr. Newman attaches a peculiar meaning to the word presumption. He tells us that it is an assent to first principles, and that first principles are the propositions with which we start in reasoning on any given subject-matter. Among these are all the great truths which are generally assented to by mankind, which he considers to partake in the nature of instincts. The

* "Such words are liberality, progress, light, civilization; such are justification by faith only, vital religion, private judgment, the Bible, and nothing but the Bible. Such again are rationalism, Gallicanism, Jesuitism, ultramontaniam; all of which, in the mouth of conscientious thinkers, have a definite meaning, but are used by the multitude as war-cries; such names and Shibboleths, with scarcely enough of the scantiest grammatical apprehension of them to allow of their being considered more than assertions." As, however, such assertions can be wielded vigorously, they are evidently a species of assent, and as such they overthrow Dr. Newman's theory.

attempt to establish these on higher degrees of certitude must be abandoned, as lying beyond the reach of the human faculties. He observes, our conceptions are only the measures of our own minds, and fail to represent the full realities of things. If this be the case, it is hopeless by any amount of reasoning on, or analysis of, these conceptions, to penetrate the regions of ontology. The infinite God is a real existence external to our minds; but the idea of the infinite is a notional conception, and is incapable of adequately measuring the reality beyond the mind. In a similar manner it is impossible to solve the questions of being and non-being, and the various questions of transcendental metaphysics by the conceptions of the human understanding.

9. Dr. Newman places, and I think rightly, among these first principles our belief in an external world. It is, as he says, an instinct of our nature possessed by man and portions of the brute creation. All attempts to prove its existence, or to get a true notion of it by analysis, beyond what is furnished by our intuitional perception of it, seem to me as complete a failure as the attempt to prove that things which are equal to the same thing are equal to one another. The axiom we perceive to be self-evident intuitively. The other, although we cannot perceive it to be self-evident, yet, do what we will, we cannot help believing it, and after every attempt to dispute its existence, we believe it still. Equally intuitive are our perceptions of the results of our particular acts of reasoning and of memory. Under certain conditions, we cannot help believing in them, and I feel as certain of the truth of my having eaten my dinner yesterday, as I am of the truth of the asses' bridge. This attaches not to the faculties generally, but to the particular acts. The moral nature of man must also be taken for granted as an ultimate principle in our reasonings. We are conscious of its existence. As matter of fact, we feel the distinction between right and wrong, and this reality is quite unaffected by any curious speculations as to the origin of this perception. Whether the feeling of benevolence, for example, can be resolved into some peculiar action of that of self-love, is a mere question devoid of any practical result. The feeling exists in fact. We are directly conscious of its existence; and whatever may have been its origin, that it is opposed to the principle of self-love. Our primary consciousness and our instinctive perception form as firm a foundation for reasoning as those truths which are commonly called axioms. Another similar principle is our belief in causation. On this subject Dr. Newman has a number of most valuable remarks; and amidst much which I

object to in many of his positions, it is satisfactory here to be able heartily to concur with him. The truth is, however much we may bewilder our minds by obscure speculations, we cannot help believing in the idea of causation as distinct from a mere succession of antecedents and consequents. The mistake has originated in representing our idea of causation as a self-evident truth, which it is not. It is an intuition of our consciousness.

10. I feel that I am a cause. I am conscious that action originates in myself; nor does my inability to express this belief in the terms of a strict definition enable me to get rid of this perception. I am conscious of myself as the cause of my own actions, in a very different sense from my being a mere antecedent, and the actions the consequent. The conception includes the consciousness of volition. Dr. Newman errs in referring the idea of causation only to experience. "The notion of causation," says he, "is one of the first lessons which a child learns from experience, that experience limiting the conception to agents possessing intelligence and will. It is the notion of power combined with a purpose and an end. Physical phenomena as such are without sense, and experience teaches us nothing about physical phenomena as causes."

11. When we speak of causes in the material world, we transfer an idea of causation derived from consciousness to the phenomena of succession and law. I am ready to admit that this has been attended with very serious errors. Still, however, I cannot think that the modern theory of antecedents and consequents has unravelled the entire mystery, even in matters of material causation. We have definite meanings when we say that want of food is the cause of hunger, or the explosion in the gun is the cause of the impulse of the ball. In such things the mind instinctively recognises something more than a bare succession of antecedents and consequents: it yields assent to the truth that all action must be ultimately referred to the impulse of will.

12. Dr. Newman has some very valuable remarks on the doctrine, that the order of nature cannot be otherwise than it is, and in that sense is necessary, and that this necessity is proved by experience. On the contrary, if proved at all, it is not proved by experience, but by reasoning, and by a reasoning which corrects the inaccuracies of our experience. As he remarks, "few concrete facts precisely repeat themselves." We can only infer their invariableness except on the principle of the existence of an unchanging will.

13. In considering Dr. Newman's position, we must carefully

keep in mind his distinction between notional and real assents ; and that he admits that the former, by an act of individual realization, are capable of being converted into the latter. Of the conversion of notional into real assents, he gives the following illustration :—

“ When the Duke of Wellington wrote his celebrated letter about the national defences it was received with a notional assent. When the French marshals talked of coming over to England it produced a real assent on the minds of the English people.”

14. Dr. Newman assigns this change to the power of the imagination, which he thinks has much to do in the creation of real assents. This is only a partial statement of the truth. The imagination presents the conception to the intellect. But the cause of the change must be sought in the connection between particular classes of our rational convictions and our moral nature. When these are aroused into activity our notional assents become real ones. The French marshals aroused the fears and the wrath of the English people, and then the original dead faith with which the Duke of Wellington’s warnings were received was converted into a living one, and created a practical influence.

15. I now proceed to examine Dr. Newman’s position that all assent is in its nature unconditional. I give his own words : “ Assent is in its nature absolute and unconditional ; though it cannot be given except under certain conditions.” He is aware of the difficulty, for he adds, “ This is obvious ; but what presents some difficulty is this, how is it that a conditional acceptance of a proposition—such as is an act of inference—is able to lead, as it does, to an unconditional acceptance of it, such as is assent ; how is it that a proposition which is not, and cannot be demonstrated, which at the highest can only be proved to be truthlike, not true, such as, I shall die, nevertheless, claims and receives an unqualified assent ? ” To establish the unconditional character of all assents and certitudes is the main point of Dr. Newman’s work, and it requires our most careful consideration. It is, in fact, its great fallacy, and opens before us the bottomless gulf of either credulity or scepticism.

16. First, if human language is to be taken as an indicator of mental facts, assent is not in all cases unqualified and unconditional. Mankind have with considerable unanimity united qualifying terms to those words which denote acts of assent. I am ready to admit that, if we contemplate the theory abstractedly or ideally, there is a sense in which there are no degrees of assent or certitude. It may be said that a thing

cannot be more than certain, and if less than absolutely certain, it is not certain. The same view may be taken of the abstract idea of assent. It is a fact that viewing the question ideally, a proposition can be true only, and cannot be more true or less true. But yet mankind unanimously concur in speaking of degrees of truth. The forms of language imply degrees of assent, and although not to an equal extent, degrees of certainty varying as to the character of the evidence. But Dr. Newman admits, and I entirely concur with him, that it is impossible to construct mental science on mere ideal conception of what ought to be. We must content ourselves with the facts of human nature. If we use correct language, so as to free our notions of assent, truth, and certainty from all conditions, the result will follow that there will be very few things left which we can either assent to, be certain of, or believe to be true. But Dr. Newman has no intention to reduce the number of our assents or certainties to a minimum, but to make a great number of uncertainties assume the aspect of certainties. His position, therefore, appears to me to be inconsistent with his own principles, and although it may have some degree of ideal truth, it is no account of the facts of human nature. It confounds between ideal and relative truth; and the greater portion of our assents and certainties are relative and not ideal ones. The position taken by him is the first step in the ladder whereby he would get us to accept a number of propositions resting on very contingent evidence as unconditionally true; or, in one word, that our faith may be stronger than the foundation on which it rests.

17. Accordingly he proceeds to make a vigorous assault on Locke and others for maintaining the contrary. Dr. Newman seems to me to argue on the principle, that if we dispute the correctness of his views we must assume that actual demonstration is necessary for every form of certitude; and that if the element of probability enters into our premisses we never can get even relative certitude into the conclusion. He quotes Locke at considerable length, where he maintains that our certitudes of truths ought not to rise higher than the evidence which supports them. Unless I misunderstand Dr. Newman, he lays down a position analogous to the admission that although the strength of a chain is no greater than that of its weakest link, it will support a weight equal to that of its strongest.

18. To establish his point, Dr. Newman enters on a minute examination of the distinction between inference and assent. All inferences he asserts to be conditioned on the premisses.

Assent is an act of the mind subsequent to inference ; entirely independent of it and unconditioned.

19. Let us test this position. I assent to the truth that the three angles of a triangle are equal to two right angles. This assent, however, is surely dependent on the proof. A child who could not understand the proof would consider the assertion far from evident. I may at present not have the proof before my mind, but I can remember that I once had, and I therefore yield it an unconditional assent ; because the premisses and the conclusion were both unconditional. When Dr. Newman asserts that all conclusions are conditional, there is an ambiguity in his language. In one sense of the words, all conclusions are conditioned on the premisses, because the truth of the conclusion is involved in the truth of the premisses. This fact is expressed by the word, therefore. But this is a widely different sense of the word conditioned, from what we mean when we speak of an unconditional assent, because, when premisses are necessary, the conclusions which necessarily follow from them are necessary also. It seems to me to be absurd to speak of the same truth as being conditioned in the conclusion, and unconditional in the assent. When I say, "therefore the three angles of a triangle are equal to two right angles," my assent is involved in the act of enunciating the conclusion, and if the matter is necessary, my assent is absolute.

20. But when I assent to this proposition, without having the proof directly in my mind, I do so on the remembrance that it once was there ; and this remembrance rests on the most distinctive act of self-conscious certainty as complete as that two and two make four. Our intuitions of space and quantity afford the firmest grounds of conviction that the mind can attain to. But it is a popular mistake to suppose that we have no certitudes except those which we derive from demonstration or from self-evident intuitions. God has acted towards us with greater liberality. I am quite as sure that I ate my dinner yesterday, or that I am now standing, and not sitting ; as I am that the whole is greater than its part ; though of the two first we can conceive the contradictory and of the last we cannot. Still, I contend that this does not make the one a greater certitude than the other. The fact, therefore, that in the formal act of reasoning, conclusions are conditioned on the premisses, because they flow from them, is no proof that conclusions in necessary matter are conditional, nor does it help Dr. Newman to elevate a conditional conclusion into an unconditional assent.

21. Dr. Newman thinks that his opponents confound between

assent and inference. We do no such thing. We say that assent is involved in the inference; but while the mind is in the act of drawing the inference, its attention is chiefly concentrated on the word therefore; and when we simply assent, we contemplate the proposition without the therefore. So far, but no further, there is a distinction in the act. I have pointed out how the acts are related, and therefore cannot agree with our author's conclusion, "that either assent is intrinsically distinct from inference, or the sooner we get rid of the word out of our philosophy the better."

22. 2nd. In reasoning on contingent matter, our assents to the conclusions partake in the contingency of the premisses. While I lay down this as a general principle, I fully admit that some kinds of moral evidence commend themselves to our reason as certainties as much as those which we arrive at from demonstrative proof. Of these I will speak hereafter. But when this is not the case, the contingency of the foundation qualifies the absoluteness of the assent. Of this kind are most moral and political propositions. They are true, not absolutely, but for the most part. We yield what we call a general assent to them, but it is one subject to qualifications. To assert that such assents are no assents at all involves a mere verbal question.

23. Dr. Newman's great objection to the possibility of there being degrees of assent is founded on the fact that assents may endure without the presence of the inferential acts on which they are founded. I am quite ready to admit the fact; but I cannot see how it proves that assent does not admit of degrees. The actual inferential acts may have passed away from the mind; but we can recollect that they once were there, and the strength of our assent will vary with the contingency or non-contingency of the conclusion, *e.g.*, I once had the entire evidence on which Müller was convicted for the murder of Mr. Briggs before my mind. My recollection of its various stages is probably now less complete. My present assent to the justice of the sentence is founded on my recollection that it was established on irrefragable evidence that Mr. Briggs had been murdered; and that no other man but Müller could have been the murderer. Therefore he was the murderer. I am quite unable to see how the presence of the word "therefore" makes my assent conditional, or the taking it away involves an unconditional assent.

24. 3rd. He alleges that assent sometimes fails while the reasons and the inferential act are still present. In one sense of these words I doubt the fact, but in another there is no question that a conclusion of the intellect does not neces-

sarily become an assent of the heart. An opposing moral principle may overbear the evidence. Thus the intellect may draw the conclusion that drunkenness is destructive to health; but the fierceness of desire may nullify its force. I cannot see, however, how this affects the question.

25. The third, fourth, and fifth reasons are founded on a similar mistake. I have already conceded that the appetites and passions are sufficiently strong to overbear the conclusions of the intellect. But many of our assents do not originate in the intellect, but in the heart, and from the heart are reflected into the intellect. These vary in intensity according to the strength of our appetites and affections, *e.g.*, I assent to the proposition that cayenne pepper is a desirable article of food exactly in proportion as I like it. If reasoning teaches me that it is injurious to health, my assent will be qualified in proportion to the cogency of the conclusion. If my liking for it is very great, it will affect my assent exactly in proportion as the appetite is stronger than the sense of danger which the reasoning creates. The facts adduced by Dr. Newman totally fail to establish his conclusion.

26. Dr. Newman contends that his argument holds good even in the purely demonstrative regions of mathematics. He is obliged to concede that in demonstrations of moderate length, the facts are against him. He contends, however, that in long and intricate mathematical investigations, inference is not always followed by assent. Of course it is not, because we are all conscious that we are liable to mistakes, and the longer and the more delicate the investigation the greater the probability of error. But when the whole processes have been fully verified, our assent becomes absolute; till then it is contingent, but contingent only as our consciousness of the imperfection of our own powers. Let it be carefully observed, however, that the conclusions of mathematics rarely, if ever, run counter to any principle, good or bad, in our moral nature. If they did, I am quite ready to admit that similar consequences might ensue, as in the case of moral or political propositions. But this does not affect the principle in question.

27. At p. 165 I find the following most curious piece of reasoning. I think that you will want no commentary of mine to point out that the author is confusing himself with the double sense of the word "conditioned." "Inference is always inference; even if demonstrative, it is still conditioned; it establishes an incontrovertible conclusion on the condition of incontrovertible premisses. To the conclusion thus drawn, assent gives its absolute recognition. In the case of all demonstrations, assent, when given, is unconditionally given.

In one class of subjects, then, assent certainly is always unconditional; but if the word stands for an undoubting and unhesitating act of the mind once, why does it not denote the same always?" I should have supposed that a person who has but one-hundredth portion of the logical genius of Dr. Newman would have seen the fallacy of this reasoning. The latter portion is answered by the simple question, If once in unconditioned matter, why should it be always so in conditional matter?

28. But our author rests a considerable portion of his case on the fact that Locke and others admit that there is a kind of contingent proof which approximates to the force of demonstration. Our assents and beliefs, therefore, can assume a more absolute form than the foundations on which they are based. I am quite ready to admit that there are kinds of moral evidence which produce in the mind the feeling of absolute certainty; but this by no means establishes the truth that our assents can be unconditioned when the evidence only justifies a merely probable conclusion.

29. To all practical purposes $1 + \frac{1}{2} + \frac{1}{4} + \&c. \text{ ad infinitum} = 2$, although I admit that to elaborate the strict metaphysics of this is very difficult. In the same manner certain kinds of moral evidence are calculated to produce, in the conclusion which results from them, all the force of demonstration. Dr. Newman admits that we must give up theories and make a simple appeal to facts. For the rationale of this, I answer, the mind is so formed as to see that it is so. Evidence much less than *ad infinitum*, even only where four or five independent lines of proof meet in a common centre, is of equal force as demonstration, and proves the impossibility of the contradictory being true. One or two links of such evidence do not produce this result, but the whole series do; and the possibility of error is sufficiently eliminated, when a sufficient number of the terms converge in a common centre. The evidence does not consist of a mere balance of probabilities, and it is to such alone that the idea of contingent is properly applicable.

30. Let us take an example. A single indication of apparent contrivance, skill, or design, is not sufficient to prove that the thing in which it exists had an intelligent author, though it may make it highly probable; still less would one or two instances prove that the universe was the creation of a divine mind. But the more we increase the number of such instances, the higher is the certainty of the conclusion; but when they are indefinitely multiplied, and all converge in a common centre, the possibility of this being the result of

chance is destroyed. It combines the effect of the summation of an infinite series, with the proof of the impossibility of the contradictory; *i.e.*, our minds are so formed that they cannot help yielding to the evidence as absolutely conclusive. If we could exhibit the cumulative force of the reasoning mathematically, the array of figures would be so great that they would be beyond the grasp of a finite mind. Locke may have been incorrect in saying that this evidence amounts to demonstration; but it has equal force as demonstration, and certainly does not help Dr. Newman to metamorphose a very conditional conclusion into an unconditional assent.

31. But an inferior degree of such evidence is sufficient for all practical purposes. Dr. Newman has ably commented on the judge's directions to the jury in the trial of Müller. The effect which the entire evidence produces on the mind is as firm a conviction that Müller murdered Mr. Briggs, as would have resulted from the evidence which is called demonstrative. I only speak of the fact. How it does so is another question. I believe that it could not help producing a similar result on any mind which is capable of reasoning, when it is surveyed in its totality. There may be minds which are incapable of surveying a chain of evidence of this kind; but this no more affects the question than the unquestionable fact that there are minds who are incapable of following the steps of a demonstration in Euclid. Nor was its conclusiveness affected by the fact that numbers of letters were published in the papers by ingenious persons who attempted to pick holes in it. An ingenious man, if he were so minded, could do the same with no small number of mathematical demonstrations. The reason why such persons rarely make the attempt, is not the impossibility, but the want of inducement to do so. But in Müller's case no infinite series of facts dovetailing into one another was required. Five or six links exactly fitting into each other were sufficient. They did not directly prove that Müller was the murderer; but what is equally conclusive on mathematical principles, that none other but Müller could have been the murderer. I cannot see, therefore, how evidence of this character will help Dr. Newman in arriving at a conclusion that all assents from their very nature must be absolute and unconditioned; or that such assents can be given when the evidence only justifies a probable conclusion. Doubtless many hold assents and convictions really stronger than are warranted by the premisses; but the ground of this is in our moral nature, not in our intellect. An apt illustration of this may be found in multitudes of assents given in the spirit of party.

32. I fully admit with Dr. Newman that the number of principles to which the mind is formed to assent independently of reasoning processes is large. They all partake in the nature of intuitions. Those which are not self-evident, or rest on the testimony of consciousness, for want of a better word, may be designated instinctive. To constitute them such, it is not necessary that they should be felt by all men; it will be sufficient that they should be entertained by a large majority of mankind. The numerous attempts which have been made to resolve these principles into higher ones have ended in no satisfactory result. In all reasonings they must be assumed as ultimate facts in human nature. Such assents are all absolute. Let it be observed, however, that multitudes mistake conditional for absolute truth, and the unconditional nature of their assents is owing to this mistake. We must also carefully discriminate between the assents which I have mentioned, and those which we make at the mere bidding of our moral nature. It seems to me that some of the most serious errors in Dr. Newman's work have originated in not attending to this distinction. He also further observes that we give assent to things which lie quite beyond the limits of formal logic. I think that this is correct as far as the purely deductive processes of the intellect are concerned. But it is deeply to be regretted, although he frequently alludes to the principles of induction, that he has given us no analysis of them. If he means that it is impossible to exhibit the principle of induction in forms of thought such as, although they will not secure us from error, will greatly diminish our danger of falling into it, he is doing much to subvert all our principles of certainty. He appears largely to identify it with the "illative faculty," mentioned at the conclusion of his work.

33. On the same principle on which Dr. Newman asserts that all assents must be absolute, he denies that certitude admits of degrees. Ideally he is right; but in a practical view of human nature we have nothing to do with ideal certitude or ideal truth. We have to deal with the feeling of certitude as it exists in individual men. As a practical fact we habitually speak of being more or less certain, and say that a thing is more or less true. If we confine our use of the words assent, truth, and certitude to those cases only where our assents are absolute, the truth indefectible, and the certitude perfect, our assents, truths, and certitudes will be reduced to the narrowest limits. The mode in which Dr. Newman puts the whole question seems to me to give us no refuge between unhesitating submission to authority or scepticism.

34. I must adhere to the general principle, that all our convictions are absolute or contingent according to the foundation on which they are erected, and that our beliefs ought not to be stronger than the basis which support them. Certitude, in the ordinary sense of that word, means a conviction resting on what the individual mind feels to be a very strong foundation.

35. I cannot help thinking that there is a good deal of confusion in Dr. Newman's analysis of certitude. It may be worth while briefly to examine what we mean when we say that we are certain of a thing. Certitude differs in some degree from assent, belief, or conviction. It involves each of these states of mind, and something more in addition. This alone is a sufficient proof that assent cannot be absolute. Now, I have already admitted that certitude in its ideal sense does not admit of degrees. Truth, as Dr. Newman says, is truth, and cannot be otherwise. But this is to do what he again and again protests against as unphilosophical, viz., to take refuge in abstractions. Such certitude is not human certitude, because, as every man knows, or rather ought to know, that man has not the gift of infallibility. I object, therefore, to Dr. Newman's expression, "the indefectibility of certitude," as confusing between an abstract conception and a concrete thing. We mean by certitude, a conviction about which no reasonable doubt exists. I contend that all these mental phenomena, as they are actual things and not ideal conceptions, admit of degrees.

36. But there is another class of propositions frequently alluded to by Dr. Newman as supporting his views, of which we are absolutely certain, yet the evidence of them is contingent. "Ireland," says he, "is an island. We are absolutely certain of it; yet the proof of it is contingent. We have never sailed round it, or perhaps seen one who has." This at once brings us to the question as to how far various lines of evidence, each of which may be contingent separately, when they meet in a common centre lead to an absolute conclusion. Why do I believe the assertion that Ireland is an island, and disbelieve that of Lemuel Gulliver, that there is a flying one called Laputa? I reply that there is a principle in the mind which cannot help recognising the impossibility of error as the result of a certain amount of evidence, which converges in a common centre. I am not concerned with the question whether this conviction is the result of a primary principle, or rests on an acquired habit of the mind. It is sufficient that it exists, and is calculated to produce as strong a feeling of certainty as demonstration. The conclusion legi-

timately follows from [the premisses. But with respect to Laputa, the testimony is valueless. If it be said that our rejection of the story, prior to all inquiry, is founded on our disbelief in the possibility of the miraculous, I deny it.

37. Another case of certitude is adduced by Dr. Newman, which he considers to rise higher than the evidence on which it is based. Every one of us, says he, feels certain that we shall die, although we admit that there are two cases in the history of man where death has not taken place, I cannot see that these two cases at all affect the general character of the proposition; but they help to prove what I maintain, that all our highest certitudes admit of qualification. The certitude in question is, after all, a conditional one. It is based on an hypothetical syllogism. We must die if God will not work a miracle to prevent it. But He will not. Therefore we shall die. I admit that we all feel certain that we shall die; but I maintain that the certitude is conditional, and not absolute, and therefore that this example of his own choosing is destruction of Dr. Newman's general position. But how, independently of the hypothetical syllogism, do we arrive at the certitude itself? Does it rest on merely probable evidence? I answer that it rests on several lines of evidence, which converge in a common focus, one of which involves the whole principle of inductive inference.

38. Dr. Newman maintains what seems very like a paradox. Although a man may have been in error a hundred times respecting the reality of his certitudes, this does not hinder him from attaining an absolute certitude on the one hundred and first time. This involves a confusion of thought between absolute and concrete certitude. I do not deny that many minds exist on whom all the lessons of experience are wholly thrown away, and that many are certain on most insufficient grounds. But if a man feels that he has been always wrong in what he has taken to be certitudes, and yet feels absolute and unqualified trust in the certitude of his last convictions, his certitude has a moral rather than an intellectual basis. It may be owing to imperfections in his reason; but I should rather attribute it to a deficiency in the grace of humility.

39. There is much which is extremely valuable in Dr. Newman's chapters on inference. But the opening paragraph is misleading on grounds which I have already pointed out. "Inference," says he, "is the conditional acceptance of a proposition; assent is the unconditional. The object of assent is truth; the object of inference is the truth-like, or a mere verisimilitude. The problem which I have undertaken is that of ascertaining

how it comes to pass that a conditional act leads to an unconditional." Let it be observed that conditional and unconditional are here used in two different senses.

40. With respect to formal inference or deduction, I agree with Dr. Newman that the mind generally proceeds from premise to conclusion without a direct consciousness of the connecting link. It reasons, not *secundum artem*, but intuitively. Artificial systems, such as formal logic, are intended not to increase our mental powers, which are given us by nature, and are perfected by practice, but to guard us against the mistakes to which we are liable. After having established a proposition by a course of reasoning, the knowledge of formal logic enables us to ascertain if we have fallen into error, and when, where, and how the error has been committed.

41. Dr. Newman points out with great force the various dangers to which deductive reasoning is liable. But these are not so much in the process itself as in its accessories. But when he infers that the conclusion, at best, can be only probable, I am unable to discover how this follows from his premisses. Surely the conclusions of geometry are characterized by certainty. As long as our reasonings embrace a simple conception only, as space or quantity, we use the same term unmodified in meaning in our principles, premisses, and conclusions. But in all other subjects of thought, a number of conceptions, some of them indefinite, enter into the terms. Hence the danger, in long courses of reason, of confusing the terms in the premisses and the conclusion. Against this the only thing which avails is the gift of a clear head. When reasoning confines itself to the use of symbols, its conclusions are free from some of this liability to error; but the process is useless unless we can translate the symbols into notional or real conceptions. Dr. Newman maintains that for the purpose of avoiding error reasoners are obliged to contract their conceptions, so as to render them more and more inadequate to represent external realities; and consequently that we can only arrive at probable truth by a process of deductive reasoning. I cannot admit this in the unqualified manner in which Dr. Newman puts it. If I saw a triangular piece of ground, I should be quite sure that two of its sides were longer than the third. I dispute not that our processes of reasoning are liable to many imperfections, our judgments are imperfect; actual things have a vast complexity compared with our conceptions of them. No doubt it would be very desirable if our faculties were more perfect. But still, if we use all the aid which scientific processes afford against the intrusion of error, and test them again and again, our de-

ductive reasonings will conduct us to something more than to conclusions which are merely probable, and we need not manufacture a new process, called "assent," to give them certainty.

42. Dr. Newman also heavily complains of deductive reasonings, because they furnish no means of dealing with first principles, and first principles are variously assumed by men of different minds. It is a mere truism to say that we must start with assumptions. The unknown must be referred to the known; the uncertain to the certain. But the necessity which we are under of starting with assumptions prior to calling into exercise our deductive intellects, has no tendency to make our conclusions simple probabilities. The danger arises from men often assuming as first principles what have no right to be viewed as such, from their prejudices, or the dictates of their affections or their passions. When considerable numbers of the wisest and the best question our first principles, it is a reason for thinking that they may originate in our idiosyncrasies rather than be actual measures of thought, and for subjecting them to a rigid scrutiny. But this does not convert all reasoning into a question of mere probability.

43. For the purpose of illustrating the unsatisfactoriness of verbal reasoning, Dr. Newman adduces the difficulty of ascertaining the true readings of Shakespeare, and endeavours to show that such processes involve higher acts of the mind, which formal inference cannot touch. "It is obvious," says he, "that a verbal argumentation on 20,000 corrections is impossible." No doubt it is, and many other processes besides verbal reasonings, are necessary for ascertaining truth. But this by no means proves that all formal logic is useless to the critic. To determine the value of various readings requires a practised judgment, and many other faculties which cannot, with our ordinary knowledge, be reduced to logical formula. But when one who possesses such faculties wishes to enforce his judgments on others, he must either reason, or find out some means of convincing them that he is entitled authoritatively to decide. But how are others to know that he is so? We have no intuitive faculty to enable us to perceive this. If, therefore, others are to admit such an authority, it must be enforced by sufficient reasons, of which the logical intellect must judge, or be derived from inspiration.

44. I agree with Dr. Newman in thinking that the mind constantly infers without leaving a distinct trace of the inferential process in the consciousness. Some of our acts of inference are also extremely complicated. These, by which we estimate

the force of a mass of concurrent evidence, are partly conscious and partly unconscious. He gives as an example the fact that we instantly reject Father Harduin's theory that large portions of the classics were forged by the monks of the middle ages. A person who is acquainted with the classics will not only reject this particular theory, but, by an act of the mind almost instantaneous, he will reject the idea of such wholesale forgery as the greatest of impossibilities. This inference is made up of a vast number of subordinate judgments and reasonings, many of which pass through the mind without leaving a distinct trace in our consciousness, and it might be very difficult to develop into the formal intellect the whole of the grounds of such judgments. But we do so when we attempt to justify them, and it is a necessary condition of influencing the opinions of others.

45. Let us take another instance of far higher importance. After taking a mental survey of the entire question, I arrive at the most certain conclusion that the four Gospels cannot possibly owe their origin to the artificial placing together of a number of independent myths. This general judgment is the result of a considerable number of subordinate judgments formed in the course of the investigation. Each of them of itself is insufficient for producing certainty, but it is produced by their concurring in a common centre. Some of these convictions, it is true, are the result of judgment rendered more perfect by practice, and so far are incapable of a formal exhibition. But the more important ones admit of formal exhibition, and it is only as far as they are capable of this that they can be brought to bear on other minds. The mode in which the mind arrived at them may not have been a formal one, but it tests them by formal methods, and it never rests until it has developed them into the forms of the understanding. It is only when it has done so that a strong feeling of certainty is produced. Because formal methods cannot render us infallible, it is no proof that they are useless.

46. In further proof that an absolute certainty can be arrived at from contingent premisses, Dr. Newman adduces our inferences respecting style, and the full assurance with which we hold that a composition is not the work of a particular author. All judgments respecting style require delicate skill and large practical judgment. The course of reasoning is unquestionably very difficult to elaborate formally. Such judgments are largely matters of individual perception, like taste and similar mental powers, and bear a strong analogy to the perceptions of the senses. These latter also vary in acuteness in individuals. It is no proof of the uselessness of our rational

processes that they require the aid of other powers, such as a delicacy of perception and of judgment. The illustration from style seems to me ill chosen, because many of its conclusions are founded on perceptions rather than on inferences, and few of them amount to certainties. When they do, it is always the result of many independent lines of evidence converging in a common focus. A man possessing a moderate acquaintance with the subject would be justified in feeling positively certain, if the *Rambler* had been discovered during the present year, and published as a work of Lord Macaulay's, that it was not his. It may be replied that a rustic would not feel this certainty. Granted; but such a mind would be unable to appreciate a long proof in Euclid. In all cases where we arrive at certainty respecting style, although the judgments are intuitional, like all those which are the results of formed habits, the grounds of them admit of formal statement.

47. It is important that it should be carefully observed that a large portion of the beliefs of mankind rests on a moral far more than an intellectual basis. Under the influence of education, aided also by an original difference in our mental structure, we become as it were set in a certain mould of thought. This mould of thought is the result chiefly of the combined action of our conscience, affections and our passions. This has been greatly overlooked by Dr. Newman. A large proportion of those cases in which he contends that certain convictions can be erected on a mere basis of probability are of this character. It forms the basis of our assents, convictions, and certainties on subjects, the strength of the one being dependent on the intensity of the other. When this is the case, the chief use which we make of our intellects is to discover a support of some kind for our foregone conclusions. Hence the truth of the adage, "The man who is persuaded against his will is of the same opinion still!" This is it which creates what we call our general line of thought, or, if I may be allowed to use an old Scriptural expression, "the light or the darkness within a man." When a proposition which agrees with this line of thought is presented to the great mass of mankind, they adopt it without more inquiry; when it is contrary to it, they reject it. Such propositions rest on a moral basis.

48. Dr. Newman adduces another example, and contends that when we feel certain that Dr. Johnson wrote the prose of Johnson, and Pope the poetry of Pope, we assume a certainty, when our premisses only justify a probable conclusion. I again reply that the certainty which we feel is the result of a number of convergent lines of evidence. It involves the logic of the

whole question of our belief in testimony. Viewing the matter, not ideally, but as a fact, our convictions vary in proportion to the evidence ; and, in the case before us, the evidence is such as to exclude the possibility of error.

49. Dr. Newman's work contains a chapter on natural inference which is extremely interesting. By this term he means inferences carried on without the aid of intermediate steps. Still it wholly fails to prove that beliefs can be really stronger than the foundations which support them. It is true that particular persons, either by genius, or habituation, or by the exclusive concentration of their mental powers on one subject, arrive at truths with a rapidity which is incomprehensible to ordinary men. I apprehend that their certainties are intuitions. At any rate it by no means follows that they are based on mere probabilities. What to us rests on merely probable evidence may be the result of an intuitional perception to them. As we do not know the *modus operandi* of such minds, it is impossible to reason on them. I quite agree with our author that our most natural mode of reasoning is not from propositions to propositions, but from things to things, from wholes to wholes. We only reason from proposition to proposition when we desire to verify the conclusions. "As true poetry," says he, "is a spontaneous outburst of thought, and therefore belongs to rude as well as to gifted minds, whereas no one becomes a poet merely by the canons of criticism ; so unscientific reasoning, being sometimes a natural uncultivated faculty, sometimes approaching to a gift, sometimes an acquired habit and second nature, has a higher source than logical rule." I doubt whether the analogy between the poet and the reasoner is sufficiently perfect to admit of reasoning from one to the other. The attempt on the part of the poet to reduce his inspirations to the rules of art, would probably destroy his poetic fire. Such is certainly not the case with the gifted reasoner. But by whatever mode the specially gifted man may arrive at truth, the moment he attempts to justify it to himself, or enforce it on others, he is compelled to adopt a common process, which admits of a formal exhibition.

50. Dr. Newman adduces the cases of a weatherwise peasant, an eminent physician, a clever Old Bailey lawyer, and the whole class of experts and detectives, as aiding him to prove his point. He says, and says truly, that these can only imperfectly state the grounds of their judgments, and that frequently, if they were to attempt to give them, they would give the wrong ones. This is often the case with judgments which are formed in cases where we have

attained a high degree of practical experience. But what does it prove? Simply that there are classes of minds which are able to discern by intuition what others can only discern through media. If such a power was general with respect to a man's mental faculties instead of being partial only, those possessing it would form a higher order of beings than the human race; but it does not follow that they could arrive at certainties out of pure contingencies. No doubt men of high mathematical powers see many truths by simple intuitional acts, which others less gifted arrive at through very painful processes. Such a faculty was possessed by Napoleon I., Sir Isaac Newton, and by those calculating boys so strongly dwelt on by Dr. Newman. Any person who has ever attended to the operation of his own mind, is aware that it often happens that after one has exhausted oneself in fruitless efforts to solve a point, a thought rushes unbidden into the mind which unravels the whole difficulty. Such is the case with respect to many practical judgments. Thucydides tells us that Themistocles was the best to form an accurate judgment of what the occasion required on the fewest possible data. This was the result of natural genius combined with experience. It is a vain attempt for those of us who have not this gift to penetrate its arcana; and, for the same reason, it is impossible to base any general theories like those of Dr. Newman on cases of this kind. We are unable to reduce them to the forms of logic; but this proves nothing either way.

51. To one important remark of Dr. Newman I must draw attention. We are too much in the habit of assuming that our reason is a simple faculty which acts with equal power on all kinds of subject matter. In the following remark of Dr. Newman there is a substratum of truth, but the mode in which it is put is certainly inaccurate.

"The rational faculty may be called departmental. It is not so much one faculty, as a collection of similar or analogous faculties under one name; there being really as many faculties as there are distinct subject matters."

52. In proof of this, he observes that the hard-headed mathematician frequently fails in historic evidence, successful experimentalists in pleading, shrewd men of business in philosophic questions, &c. "Priestley," says he, "was great on electricity and chemistry, but was weak in ecclesiastical history; Newton, strong in the Principia, reasoned badly on the Apocalypse. It is notorious how ridiculous a clever man may make himself, who ventures to argue with professed theologians,

critics, or geologists. The defect is not only in the ignorance of the facts, but in their inability to handle the facts suitably."

53. If Dr. Newman, instead of assuming that there are so many rational faculties as there are subject matters (which is a most questionable position), had spoken of our rational powers acting on different subjects, his remarks would have been worthy of deep attention at the present time. It is undeniable that the tendency is very great on the part of eminent men to speak with authority on points quite remote from their special departments of study.

54. Equally important are our author's remarks about memory. Popular opinion represents it as a single faculty; but it by no means follows because a man has a retentive memory on one thing that he must have it on another. Dr. Newman tells us of a person who could enumerate in exact order the names on all the shops from Hyde Park Corner to the Bank; and of another who could stand an examination in the academical history of any M.A. taken at random in the Kalendar. It by no means follows that such persons could remember a consecutive course of reasoning. I once knew a man who could remember the side of a page in which a thing was to be found, but who could tell you little else about it.

55. Chapter IX. is divided into three portions, and forms the conclusion of the directly scientific portion of Dr. Newman's work. It treats of what he calls "the illative sense." I think that some of its positions are both questionable and dangerous. I am compelled to make a rather long extract:—

"Certitude (p. 337) is a mental state; certainty is a property of propositions. Those propositions I call certain which are such that I am certain of them. Certitude is not a passive impression made on the mind from without by argumentative compulsion; but in all concrete questions (nay, even on abstract, for though the reasoning is abstract, the mind which judges of it is concrete) it is an active recognition of propositions as true, such as it is the duty of each individual to exercise for himself; and when reason forbids, to withhold. And reason never tells us to be certain except on absolute proof, and such a proof can never be furnished to us by the logic of words; for as certitude is of the mind, so is the act of inference which leads to it. Every one who reasons is his own centre, and no expedient for obtaining a common measure of mind can reverse this truth; but then the question follows, is there any criterion for an act of inference, such as may be our warrant that certitude is rightly decided in favor of the proposition inferred, since our warrant cannot be as I have said scientific? I have already said that the sole and final judgment on the reality of an inference in concrete matter is committed to a mental faculty, which I have called the illative sense, and I own I do not see any way to go further than this in answer to the question. . . .

If I may not assume that I exist, and in a particular way, i.e., with a particular mental constitution, I have nothing to speculate on, and I had better let speculation alone. Such as I am, it is my all ; this is my essential standpoint, and must be taken for granted ; otherwise thought is but an idle amusement, not worth the trouble I am what I am, or I am nothing. I cannot think, reflect, or judge, without starting from the very point which I aim at concluding. My ideas are all assumptions, and I am ever moving in a circle. I cannot avoid being sufficient for myself, for I cannot make myself anything else, and to change me is to destroy me," &c.

56. Several sentences in this remarkable passage are worthy of our deepest attention ; but taking it as a whole, I cannot but consider the position as one which is extremely dangerous and unsound. It seems to me to leave us little alternative between taking refuge in authority, or assuming that truth for man is that which each man troweth. Dr. Newman expressly states that in all concrete matter the sole and final judgment on the validity of an inference is committed to what he designates " the illative sense."

57. In the remaining chapters in which he treats of its nature and character, he expressly affirms that there is no scientific method whereby the goodness or the badness of its judgments can be tested, or even held in check. " I am what I am," says he, " or I am nothing. I cannot, think, reflect, or judge, without starting from the very point which I aim at concluding. My ideas are all assumptions, and I am ever moving in a circle." I am far from denying the existence of partial truth in the passages which I have quoted ; but in the sense in which they are here used, they seem to me to lead to the conclusion, that we are destitute of all other criteria of truth or means of eliminating error except those supplied by the illative sense of each individual. If it be said that Dr. Newman expressly limits these assertions to concrete questions, I reply that the passage which is inclosed in a parenthesis asserts that it is no less true in abstract reasonings ; for, says he, " although the reasoning is abstract, the mind which judges of it is concrete." This resolves abstract reasonings into concrete ones, of the validity or invalidity of which the sole judge is the illative sense of each individual.

58. Again, says Dr. Newman, " Reason never bids us be certain except on absolute proof." I reply, " Reason bids us to accept as certain self-evident intuitions, the testimony of our consciousness, the primary instincts of our nature ; and accepts things as certain on much other evidence, which, unless I greatly misunderstand the former portions of this work, Dr. Newman would not allow to admit of absolute proof. If the sole judge of

truth is the illative faculty of each individual, what becomes of absolute proof? The very idea of it implies that there must be some common measure of minds. But he then adds, that "such certitude can never be furnished to us by the logic of words, for as certitude is of the mind, so is the inferential act which leads to it." I ask, does not the logic of words assist us in testing the validity of our reasonings, and consequently aid us in arriving at our certitudes? Will not systematic analysis of the forms of thought aid us in discriminating where error may have been introduced into our processes? Doubtless all systems require the presence in the mind of judgment, clear perception, and a multitude of other mental powers. But is this a reason why we should throw all logical forms and processes to the winds, scorn the use of accurate language, and trust exclusively to our illative sense? But more astonishing still is what follows: "Every one," says Dr. Newman, "that reasons is his own centre, and no expedient for attaining a common measure of minds can reverse this truth." Doubtless there is a sense in which every man that reasons is his own centre. It is true abstractedly, that I am what I am, or I am nothing. But how does it follow that expedients for attaining a common measure of minds are not eminently useful to aid us in ascertaining whether our conclusions are true or false? If my illative sense tells me one thing, and those of ten thousand others the direct contradictory, although I admit that there is no reason for assuming at once that they are right and that I am wrong, yet it forms a sufficient ground for my subjecting the conclusions of my illative sense to a very rigid scrutiny. "Our warrant," says Dr. Newman, "cannot be scientific." I fully admit that various mental powers are necessary to aid us in the discovery of truth, as for example—the perceptions of our senses, our judgments, our reasoning powers, our imagination, our powers of insight, even what Dr. Newman calls our illative sense. For although I do not think that the term sense is a correct designation of such a power, I am far from denying the existence of an illative faculty. But as all these are liable to error, their processes require verification. Logical formularies may not enable us to discover new truths; but they are indispensable as tests to be applied to our various mental operations, to enable us to ascertain when we may have arrived at unsound conclusions. The whole of Dr. Newman's observations are based on a confusion of thought, which we should have hardly imagined possible in such a man. Throughout the whole of these chapters he overlooks the distinction between logical formulæ as an instrument for the discovery

of truth, and their value to aid us in the elimination of error. Dr. Newman is led into this by the necessity which he feels himself under of maintaining the unconditional character of our assents and certitudes. To do so is essential to the mental position which he occupies. This foregone conclusion has led him not only deliberately to depreciate the rational faculty, but to propound a theory which leaves us only two alternatives, viz., either submission to absolute authority, or that truth is to every man the unassisted conclusion of his own illative sense.

59. "I have already said," observes Dr. Newman, "that the sole and final judgment on the validity of an inference is committed to a faculty, which I have called the illative sense, and I own I do not see any way to go further than this in answer to the question." This assertion is hardly correct, for while I own that Dr. Newman cannot "see his way," yet the remaining chapters attempt to make a considerable advance; and, although they do not assert that authority is our final refuge, yet their obvious drift is to imply that it is so. In gifted persons Dr. Newman seems to think that the illative sense acts in a manner somewhat analogous to an inspiration from Heaven. On the man of genius it confers the power of intuitive insight. On him who has devoted himself to a special department of study, it confers the power of discerning truth where to other men there is nothing but darkness or twilight. It enables the man of moral discernment (answering to the Greek *φρονιμος*) who has perfected his power by practice, to discern instinctively the true course of moral action. The same principle exerts a similar power through the entire course of human knowledge. But what is the most serious matter of all is, that Dr. Newman has not only erected a court which possesses this extensive and summary jurisdiction, but he denies us the right of appealing from its decisions.

60. I by no means deny the existence of these higher faculties of the mind, and their important influence on the discovery of truth. But between this and the summary assertion that all formal logic is worthless, the interval is wide. The truth is, that high genius, however necessary for enabling us to penetrate into the inner recesses of the temple of truth, does not confer infallibility. The most perfect practical judgments do sometimes fall into the most palpable errors. The acutest observers are guilty of hasty generalizations. The clearest intellects are subject to bias, and are warped by prejudice. The most practised reasoners at times commit errors in their reasoning. As often as the possessors of these high faculties require to vindicate their own positions even to themselves, they are compelled to fall back on the formal processes of the

understanding. While we attach due weight to the higher orders of mind as authorities in their special departments, still we know that they are liable to error. It is therefore necessary that we should possess ourselves of a balance in which we can weigh even their most authoritative utterances. But if this is the case with such men, what shall we say with respect to those of inferior endowments? Shall we assume that the illative sense of each, unchecked and unhindered by any scientific process or formal system, is the only ultimate test of truth? If Dr. Newman is right, it must be so, unless we are to accept as our authoritative guides those to whom Heaven has communicated special faculties for penetrating into truth. But how shall we ascertain who have special faculties? Dr. Newman has no doubt a reply ready there which is satisfactory to his own illative sense, but I am afraid that it will not be equally so to ours. If such a person must be chosen, the choice is one which will require the highest exercise of our reason; and, knowing it to be fallible, we must endeavour to check its action by all the aids which philosophic investigation and logical formulæ can afford us. But there is another side to this question. If we are told that there is no court of appeal in which the contradictory decisions of the illative sense of each can be reviewed, we must come to the conclusion that that is true to each what the illative sense of each individual determines to be so; and as this sense as it exists in different persons frequently takes contradictory views of what is true, the conclusion is inevitable that truth is apparent only, not real. This state of mind is separated by a mere hair's breadth from the ocean of universal doubt.

61. I conclude with a quotation from Dr. Newman :—

“Certainly, however we account for it—whether we say that one man is below the level of nature, and another above it, so it is, that men taken at random differ widely from each other in their perception of the first elements of religion, duty, philosophy, the science of life, and taste, not to speak here of the difference in the quality and vigour of the illative sense itself, comparing man with man. Every one, in the ultimate resolution of his intellectual faculties, stands by himself, whatever he may have in common with others; and one only is his ultimate judge. Not as if there were not an objective standard of truth; but that individuals, whether by their own fault or not, variously apprehend it. Thus one man deduces from his moral sense the presence of a moral governor, and another does not; in each case there may be an exercise, and a sound exercise, of the illative sense. . . . The illative sense of the one is employed upon and informed by the emotions of hope and fear, and a sense of sin; whereas the other discerns the distinctions of right and wrong in no other way than he distinguishes light from darkness, or beauty from deformity.”

I think it needless to comment on this passage : its tendency is obvious.

62. I have carefully abstained from bringing to your notice either the theological illustrations, or the two chapters in this work which form an application of his scientific principles to certain questions of the day. I have endeavoured to keep myself strictly within the regions of science. If Dr. Newman is scientifically right let us accept the consequences, be they what they may ; if not, let us fearlessly reject his philosophy. I now therefore add my final opinion that, however much I admire some detached portions of his work, its fundamental principles are thoroughly unsound, and present us only with the alternative of credulity or scepticism.

63. When I composed this paper I was not aware that Dr. Newman had reprinted his *Essays on Miracles* with notes, a short time after the publication of the *Grammar of Assent*. I have recently read these *Essays*, and in one of the notes, the *Essay in aid of a Grammar of Assent* is directly referred to. I think, therefore, that I am justified in arriving at the conclusion that these two works are intended by their author to be closely related one to the other, and that the *Essay in aid of a Grammar of Assent* is designed to supply something like a scientific basis on which to rest the two *Essays on Miracles*. Had I been aware of the republication of these latter in such close connection with "the Grammar," I should certainly have subjected those portions of it directly bearing on the subject-matter of the two *Essays* to a most rigid scrutiny. The first *Essay on Miracles* is a weak defence of those in the Bible, and was written at an early period of Dr. Newman's career. The second, which is of a much later date, is a laboured effort to exalt the so-called Ecclesiastical Miracles, and to give them the appearance of credibility. While there is a kind of acknowledgment of an indefinite kind of superiority in the miracles of the Bible, the author has done his utmost to adduce every argument which has a tendency to exhibit them on the same level as the ecclesiastical ones. If I wished to attack the biblical miracles, I think that my most effective means of doing so would be to employ much of the line of argument made use of in this *Essay*. I am satisfied that it can only exercise one result on minds who use their reason as a guide to truth. Instead of inducing them to accept the ecclesiastical miracles, it will throw great difficulties in the way of their accepting the biblical ones. Many writers of Dr. Newman's school make free use of the kill-or-cure remedy. They seem utterly unconscious that killing is the rule, and curing the rare exception. In the mean time, the hard-

headed unbelieving world look on and smile. I have added these observations for the purpose of showing that the strongest things which I have said of this Essay are not too strong. While I fully admit that there are many things in it which are attractive, and even instructive, yet we must be careful in reading this work to keep in mind that, however fair is the building, its foundations are completely rotten. On first perusing it, I was much struck with its apparent liberality of thought. A more minute investigation speedily convinced me that it was apparent only. Within a twelvemonth this work has now reached a third edition. Many have innocently mistaken it for an important contribution to Christian philosophy. It is impossible for me to express any other opinion of it than that, despite of its many beauties, its tendencies are highly sceptical.

The CHAIRMAN.—I am sure we all return our best thanks to Mr. Row for his very interesting and able paper. It is extremely valuable to us because it does an important portion of our work. Our business is not only to combat sceptical arguments, but also to clear away those which are unsound on our own side. That I think Mr. Row's paper tends to do for us, and for this reason more especially is he entitled to the thanks of this meeting. (Hear, hear.) I shall now be glad to hear any observations which any present may have to make upon the paper.

Rev. J. H. TITCOMB.—I am in the unfortunate position of agreeing in part with Mr. Row and in part with Dr. Newman. (Hear, hear.) There seem to be three stages in the discussion—first, "inference"; then, "assent"; and lastly, "certitude"; and this seems the natural and the direct order in which they ought to stand and in which they do stand according to both authorities. I take it that, with reference to what has been said upon inference, there is no difference of opinion between Dr. Newman and Mr. Row. Both concur in allowing that inferences must be conditioned—that they rest upon certain premises and are conditional. Then, when we come to assent, I fully agree with Mr. Row.

Rev. C. A. Row.—I maintain that Dr. Newman in his Essay uses the term "conditioned" in two senses, and that is the great cause of the fallacy of which he is guilty. He speaks of a conclusion as being conditional when it is only conditioned by being the conclusion of an argument.

Mr. TITCOMB.—Then, with reference to "assent," the position which Dr. Newman takes up is that it has no degrees. Mr. Row opposes this view—I think, rightly; for, using "assent" in its common-sense acceptation, it is sometimes absolute and sometimes conditional. Take this example: The world is a globe. I assent to that proposition from a series of inferences. In the first place, it has been sailed round. In the next place, when an eclipse of the moon occurs, the shadow of the earth is always circular. In the

third place, when I stand on the seashore and view the distant ships coming towards me, their masts appear first, and then their hulls. These are simple, practical, common-sense facts which enable me to draw a series of inferences that the proposition is true, and I give to those inferences an assent which is perfectly absolute, and which then passes into the next stage, that of certitude. But when I am told that the earth is not only a globe, but an oblate spheroid,—flattened, that is to say, at the poles,—because the vibration of a pendulum in countries near the equator is slower than in those countries which are nearer to the poles, from which the inference is drawn that the equatorial regions are at a greater distance from the centre of gravity than the polar regions ; and also that the world is an oblate spheroid, because, supposing it to have been fluid in its first formation when sent with its centrifugal motion on its own axis round the sun, it would, on scientific principles, assume that shape ; these inferences lead me to assent to that proposition. But that “assent” is not so absolute ; it does not, to my mind, assume that character of “certitude” which the first proposition does. I may say that I have no doubt about it ; but there is not such a practical common-sense appeal to my understanding in the one case as in the other. I merely bring this forward to show that I think certain assents to propositions may be absolute, and others not so absolute, and therefore, in that view of the case, I conceive that Mr. Row has more or less established his position. I now come to “certitudes” ; and I must confess that when Dr. Newman says that there are no degrees in certitudes, he has the best of the argument. I freely grant that certitudes may be illusive, but while they last they must, from the very nature of the case, be absolute. The subject has no degrees and no conditions whatever. Take an unreal or illusive certitude, such as the mirage in the desert. The traveller going through the desert declares, beyond all possibility of mistake, that he sees water, though the guides assure him to the contrary. There you have an absolute certitude in a man’s mind, though it is only an illusive one. In the 38th section of his paper Mr. Row says :—

“But if a man feels that he has been always wrong in what he has taken to be certitudes, and yet feels absolute and unqualified trust in the certitude of his last convictions, his certitude has a moral rather than an intellectual basis.”

Now I think that reasoning is wrong. Dr. Newman maintains, as Mr. Row points out in the beginning of the paragraph, that a man may have been in error several times over in his certitudes—say three times wrong as to the reality of his certitudes,—but yet that does not prevent him from having an absolute certitude on the fourth occasion.

Mr. Row.—Dr. Newman says “a hundred times wrong.” He has purposely put the figures very high.

Mr. TITCOMB.—For my purpose I prefer the smaller figure. Now the mirage which appears to the inexperienced traveller is a matter of certi-

tude to him, and it may continue to be so, even on the second and third occasions of his seeing it. But on the fourth occasion he may say, "Though I did think it was water before, my experience has now proved to me that that idea was a mistake;" and if you tell me that that is a moral rather than an intellectual matter, I join issue at once. He may say of the mirage, "I am now absolutely certain that it is not water; I was illusively convinced before." That surely is a case in which a man, after having been four or five times in error before, has a right to reap the advantage of his previous mistakes, and to have an absolute conviction which is not illusory. I think Dr. Newman would be right in saying that a man might be in error three or four times, and yet the very next time have an absolute certitude. There is much in this page of Mr. Row's paper with which I cannot agree, especially where he speaks of death. I think Dr. Newman and Mr. Row are equally wrong, when they state that if a man says "I shall die" he expresses a certitude: the only difference between them is that Dr. Newman does not allow it to be conditional, while Mr. Row asserts that it is, that it will happen if there is no miracle to prevent it. Now I maintain that no man has a right to say "I shall die;" it is not a fair example—it is not a case of certitude at all. Who shall say that the world may not end in our lifetime? and yet that would not be a special miracle. The illustration is an unfortunate one both for Dr. Newman to have originated, and for Mr. Row to have adopted, because I do not think it involves a case of certitude at all. There is one other question which I must touch upon, and that is as to whether a certitude may rise higher than the evidence upon which it is based? That is a very important question, and I confess that my mind is not thoroughly made up upon it. I should say that in ninety-nine cases out of a hundred the certitude would not rise higher than the evidence. I could not say, for instance, that Mr. Row is a clever man unless I expressed a conviction on a level with the evidence on which it is based, and we have in this paper quite sufficient grounds for such a conviction. (Hear, hear.) In ninety-nine cases out of a hundred that principle would remain true; but take another case, that of the existence of God. The atheist maintains that when you use the argument of design to prove the awful and insuperably grand conception that there is a Supreme Creator, Eternal and Omnipotent, you have there a conviction expressed which is higher than the evidence upon which it is based. I mean to say that the skill and design, which we see in creation, great as they are, do not afford to the atheistic mind a sufficient base for the certitude of the existence of God. To my mind they do afford it; but how far it can be thoroughly established that the evidence is exactly equal to the conviction arrived at is what I am in doubt about, and I should like to hear some other opinions expressed upon it. I can quite conceive that form of reasoning to meet Paley's argument from the watch, arguing the existence of a maker from its skill and contrivance—I can quite conceive that form of reasoning which alleges that the conviction arrived at in the case of the universe is higher than the evidence on which it rests. At the same time I go with

Paley's argument in the form of a parallel or ratio :—as the certitude of the existence of a maker and contriver from the design of the watch, so the certitude of the existence of a Creator from the vast mechanism and the grand contrivances, moral and material, which are found throughout creation ; and if, therefore, the one conclusion is sound the other must be also by a parallel form of reasoning. I think it is a debateable question, whether abstract certitudes may or may not rise higher than the grounds upon which they rest. If we can prove it scientifically, so much the better for us ; but it should be thoroughly well considered, and not taken too much for granted. (Cheers.)

Rev. Dr. Rigg.—Although I have not heard the whole of the paper, I take the liberty of rising, for the reason that I have very carefully examined Dr. Newman's Essay from the first page to the last, and I have analyzed it, and formed a very careful judgment upon its general scheme and foundations ; and although I have not heard the whole of Mr. Row's paper to-night, I have examined it, and found it to be a very valuable one ; and I will take the liberty of saying, in the first place, what the character of the Newman philosophy in this essay appears to me to be. I take it that the Newman philosophy, as such, is clearly a sceptical philosophy—essentially and profoundly sceptical,—and that scepticism is the philosophical basis of the whole of the essay. His is a philosophy which teaches that there is no such thing as absolute truth to be discovered by any objective demonstration whatever. It is, in fact, the philosophy of Hume. I grant that it is not the religion of Hume, but it is his philosophy ; and I am sure the more it is analyzed the more clearly it will be seen that it is closely allied to the philosophy of Hume and also to the philosophy of Mill. I am sorry that I have to speak less from book than I desire to do, but the fact is that I came here in great haste, or otherwise I should have brought Dr. Newman's Essay with me, so that I might have referred to some passages in it. One remarkable thing which Dr. Newman tells us is, that a straight line is a mere notion ; and the more that statement is studied the more I think it will be seen that nothing but scepticism of a very peculiar character could lead to such a statement as that a straight line is a mere abstract notion. Such being the case, the whole of Dr. Newman's Essay, though consistent in its general scope, is inconsistent, as all essays not begun in truth must be, in many of its particular statements. I think Mr. Titcomb has missed the distinction which Dr. Newman carefully lays down between certitude and certainty—that distinction is vital. We must all admit that there are many cases of illusive certitudes in which conviction, as we feel it, far transcends the evidence on which it rests. There can be no doubt of that. But what Dr. Newman teaches us is that there is no such thing as certainty which is absolutely attainable. Certitude, he maintains, may be felt, but certainty cannot be attained. I confess that I should not agree with Mr. Row in saying that certitude, as such, is liable to variation and to degrees. I have not the least objection to take Dr. Newman's

definition as it appears in his essay, that certitude, by which he means a personal assent, is not capable of variation or of degrees. But whether it is capable of variation or not is scarcely worth contending about. What Dr. Newman says is, that I may feel quite sure of a certain thing and have no sort of doubt whatever upon the matter, and that is my certitude; but he is careful to tell us that it does not follow that there is any certainty in it. There may be no certainty at all in the matter. Then Mr. Row does not take notice of this—that Dr. Newman lays it down that these certitudes are not only without any doubt or degrees, but are absolutely indefectible; and he does not mean that they are so because they represent in any measure a truth, for he says distinctly, so far as I can understand him, that a prejudice native to the soul of a man is as indefectible in its nature as any truth intuitively apprehended. He shows us, by interesting explanations, how, by a combination of intuitive impressions and unconscious inferences, the assent of the mind is given to a conclusion as if it were intuitively certain, and axiomatically true, though it may really be a mere prejudice. Such conclusions, true or false, abide. A man may seem to change his fundamental convictions, but in reality there is very little change at all: there is only a falling off of many inconsistent ideas, while the radical truths and prejudices in the mind live there still, and their development leads to a man being supposed by others to be inconsistent, though in reality he is not inconsistent, but is only changing in the sense of developing. There are some very interesting expositions of this kind in Dr. Newman's essay, in which he shows that men holding such principles do not at first know all their inconsistencies, but by degrees those inconsistencies fall off, and the men themselves remain the same men, holding the same certitudes as they held at the beginning, while the things which are inconsistent gradually fall away, leaving the radical principles of their faith behind, coming out finally into full form and development. Then there is another part of Dr. Newman's remarkable views on this subject. We may feel sure, and our assurance may have no doubt whatever about it, but that does not imply that there is any sort of objective reality or truth whatever in it. Dr. Newman goes on to ask, How is a man to feel sure on debateable points? He lays it down that there are only two ways in which a man can get to be assured of anything. One is in virtue of a conviction that has taken hold of his being, and that is not likely to be dethroned; but Dr. Newman admits that there are many things which we are expected to believe, but which we have not intelligence or apprehension enough to understand, and he then consistently teaches in effect thus: "If I cannot get certitude on my own account, I must take it by proxy—I must go to authority. I must go to some man whom I know to be very wise and very good, and knowing that I am but poor and ignorant compared with him, I take his certitude and make it my own. So, as to spiritual truths, I give up my own will and mind to the 'certitude' which the Church teaches, as I have not any of my own. I do not understand what it is that is taught, but the Church teaches me

so-and-so, and I adopt and embrace the 'certitude' which belongs to the Church, that being, as it were, God Himself, and that certitude becomes my 'certitude' by an act of faith and of adoption." Thus he teaches us that we either have our certitudes at first hand from our own personal assurance, and from the embrace and assent of our own minds and understanding, or else we adopt them on the authority of another in whom we confide, and that they relate sometimes, it may be, to a proposition which we understand, but often, as he elaborately explains, to a proposition which we do not understand at all, but which he declares we accept in virtue of the authority of some one who commends it to us. Then there is another consequence which follows from all this. He teaches us that the man who embraces religion on the ground of reason gives one sort of acceptance, while the man who takes it from faith gives quite another; and Dr. Newman says that these are two different and mutually exclusive modes of acceptance, and that the man who takes his religion from reason is in so far not a believer, while he who takes it from faith is in so far not a man of reason. The divine blending of faith and reason into the one blessed assurance of truth, Dr. Newman distinctly rejects in the philosophy of his book. Then as to assent: Mr. Row has illustrated the points on this subject very ably, but it does appear to me that nothing can be more unreasonable than Dr. Newman's doctrine on this subject. He teaches us that by some means or other, when we accept a proposition, the assent which we give to it is voluntary, distinct, absolute, and our own act, and he tells us very emphatically that it is a voluntary act. Now I do not hold that assent is a voluntary act; in the majority of cases I do not believe that it is a matter which is affected by the will; but that is what Dr. Newman teaches; and he tells us that when once we accept a conclusion, and make it our own by an act of complete assent, we may then cast down whatever ladder we may have used in order to climb up to and grasp that conclusion or proposition,—that we may cast down the ladder and have nothing more to do with it on the mere strength of a strong, wilful faith, and be, as it were, suspended in mid-air without any sort of basis on which to rest. Dr. Newman goes on to try to prove that position by a variety of illustrations, one of which seems curiously weak. He asks, is it not a fact that persons retain their assents without the slightest memory of the reasons for them? and does not that prove that assent is independent of the reason? It is just as true that we retain our probable conclusions after we have forgotten all the reasons for them. Dr. Newman draws a distinction between assents and probable conclusions, and he says that "assent" stands by itself, and is independent of the reasons which generated it; but it is just as true that we retain our probable conclusions after we have forgotten all the reasons on which we assented to them, as it is that we hold to our absolute assents after we have forgotten all the reasons on which they were based. If, therefore, there is any force in the argument at all, it goes to prove that probabilities are as independent as assents, and have as little to do with the reasons on which they rest—that

the acceptance of a probability is just as much a matter of strong will and of the resolute determination of the mind, as is the acceptance of an assent. Dr. Newman says a great deal about the "illative faculty." It is easy to call the whole power and exercise of the mind by which we reason an illative faculty, and no doubt there is one grand department of the mind by which we are able to apprehend and infer, and to connect premises with conclusions, and to go, often instinctively, through the processes of induction. But if it is to be supposed that in speaking of an "illative faculty" a discovery has been made, I confess I cannot understand it, as it was always known that we had these various powers, and it was open to any one to call them by this name at any time. As to calling all this an "illative faculty" in any special sense, I think that that sort of language has misled even Dr. Newman himself, as well as some of those who have read his essay. I cannot help thinking that Dr. Newman has come to this conclusion : that induction and all that belongs to inductive reason is entirely separate from intuitive certainty,—that there is no basis of intuitive certainty on which inductive processes themselves repose,—that there are no intuitive principles of the mind which can be recognized, defined, and analyzed,—and that what we call induction, so to speak, is a mere rule of thumb. Here again Dr. Newman agrees precisely with Hume and with Mill. I remember that Dr. Chalmers fought this out long ago with Hume. The question was whether the uniformity of nature was in any sense whatever an intuition of the mind,—whether the law of cause and effect was in any sense an intuition of the mind,—or whether all that we believe as to causation and the uniformity of the laws of nature was a mere matter of inference by us from the fact that those laws have operated in such a manner so many times, and they probably will so operate again. They actually tell us that all our certainty is a mere matter of calculation from probabilities, not resting on any foundation of intuitive principle whatever. It is clear to me that all that is of a piece with this essay, and Dr. Newman does not allow that there is any sort of assurance in our conclusions, only that we come to such conclusions because of our experience. All that we can get at is a persuasion in our own minds, but to the bottom of that persuasion we can never get. There is one point on which I do not agree with Mr. Row. In his 50th section, he has referred to the question involved in those peculiar powers of mind possessed by some people, such as weather-wise peasants, eminent physicians, clever Old Bailey lawyers, and other experts, which powers have been commented on in a very interesting illustration by Dr. Newman. Mr. Row intimates that probably persons with these wonderful faculties have certain intuitive powers which others do not possess ; but I must quarrel with that view, for I do not believe that there is any set of men who possess intuitive powers different from those of other men. I think there is a fallacy in the use of the word "intuitive." Everything we do is in a sense intuitive—all our processes of reasoning in a sense are intuitive, and even if we put a syllogism it is a matter of intuition. All the processes are intuitive, and the question is how to weave them together safely and wisely so as to bring us to

a conclusion. If the proposition is that some men have the power of over-leaping intermediate data, and can see into wonderful conclusions of arithmetic, geometry, or anything else without the essential data which would warrant them in coming to such a conclusion, I do not think such a proposition will bear examination at all. There are principles which are self-evident to all highly and truly cultivated people, and no doubt some people see more rapidly the connection which exists between different truths than others do. How they do it is a mystery which we cannot solve. But when we speak of intuitive discernment, it simply means that certain minds have a more rapid power of passing from one thing to another, and of combining ideas, than others have, and I feel so strongly on this point—the distinction drawn by Mr. Row between the intuitional and the inferential processes, which themselves mainly consist of unconscious inferences intuitively drawn,—that I should be very glad if Mr. Row would be able by some supplement to his paper to correct what I consider a great flaw in an exceedingly able essay. And now I have only to repeat that I should not have occupied so much of your time if it had not been for the fact that I have very carefully examined and analyzed the essay on which this paper is written. (Cheers.)

MR. REDDIE.—As it is now late, and Mr. Row ought to have some time to reply, I shall not occupy your attention for long. I must join in offering my tribute to the able paper before us, but cannot help saying that it is not quite clear in some parts, and perhaps this has arisen from the author's over-conscientiousness in following Dr. Newman's lead too closely, indeed so completely, that the paper seems to want a focus, which, however, I am glad to find that the remarks both of Mr. Titcomb and of Dr. Rigg have given to it. It seems to me that a great part of the misunderstanding and difference of opinion between Dr. Newman and Mr. Row arises from their employing words in different senses, instead of using definitions on which they are agreed. Even Dr. Rigg has used words in a sense in which Dr. Newman scarcely employs them. We have the word "assent," which ordinarily means to agree to a thing.* And I thought that Mr. Titcomb while giving us an instance on the opposite side, was really demonstrating Dr. Newman's view. He said he gave his complete "assent" to the proposition that the world was round, but he was not quite sure that it was an oblate spheroid, and therefore he only gave a qualified assent to the proposition. Now, from the arguments he used in proof of both propositions, it struck me that he did give his complete assent to both of them.

MR. TITCOMB.—What I meant was that there was a difference of degree in the assent.

MR. REDDIE.—Mr. Titcomb either accepts the proposition or he does not,—he must necessarily do the one or the other,—and I think that in this matter of assent, Dr. Newman is quite right in saying that an assent must

* Dr. Newman gives an entirely new meaning to the word.

be either a decided "yes" or "no." I hold that Mr. Titcomb does assent to the proposition that the world is an oblate spheroid. He does not mention the argument as to its being a prolate spheroid, and I do not suppose he thought that argument worthy of consideration. Then I most thoroughly agree with one remark which fell from Dr. Rigg, as to Dr. Newman having put out the view with reference to an "illative sense" as though it were some new discovery. If the phrase "illative sense" is used in its ordinary signification, as that sense or faculty (for I hold to the distinction which Mr. Row draws) by which we can infer, then some of Dr. Newman's statements appear like mere truisms. The illative sense being the sense by which we infer (and if that is not its meaning I do not know what is), of course, any conclusion that we draw is the work of that sense or of our reason, but the confusion of thought and difference of opinion upon many points between Dr. Newman and Mr. Row is traceable to this same want of definition. The "illative sense" is the only means we have of verifying inductive processes and although this view may appear to Mr. Row to be essentially unsound, yet I think he will find Dr. Johnson defines "illation" as merely "inference," and, if that be so, I do not see what other sense you could use to draw an inference with, except the sense which draws inferences. (Hear, and laughter.) Some of Dr. Newman's most high-sounding phrases resolve themselves into very little indeed, if you employ a common signification for them. Mr. Row commends Dr. Newman's book for its modesty, as it only professes to be an essay *in aid* of a grammar of assent, and not a grammar itself, and he seems to think that a great point would be gained if we could elaborate principles from which we could get a complete system; but, ever since man existed, we have had these things, and these inferences have been arrived at. What is grammar? Merely the custom of language, and a grammar of assent would be only an examination of the processes of the mind by which we assent to things. But those processes have existed as long as human beings have, and if we do not understand them I am not surprised at it, if we are to use language as Dr. Newman has done, and to treat the subject in such a fashion. Take the instance which he gives of lucern being *medicago sativa*. There is nothing in teaching a child that lucern is food for cattle any more than in teaching it a language. It is all the same whether you call lucern by its Latin or English name; any child who is taught a new word accepts it simply because it is taught it, and if you always apply that word to one particular thing it becomes a mere representative of the reality; and therefore there is nothing in that famous instance of Dr. Newman's which is worth a moment's consideration. (Hear.) There are several arguments in Mr. Row's paper with which I cannot agree, although I do not differ from his conclusions; and there are others that I must notice, because they appear as things which are put out without comment as self-evident. For instance, there is the statement in the 9th section, that benevolence is opposed to the principle of self-love. Now, I do not think that is true. Benevolence means good-will to your neighbour—to love your neighbour as yourself. That

is its ultimate principle, and it has the high warrant of Scripture, so that you are not to hate yourself in order to be benevolent, but to love your neighbour as yourself. If a man did hate himself he would be regardless of salvation, and of doing what is right. All piety and probity are maintained in self-love. Then there is a passage from Dr. Newman, in which he says that "experience teaches us nothing about physical phenomena, as causes," unless we first consider that we are our causes, and interpret what we see through the reflection that we can by our will do certain things ; but rational beings, and even intelligent animals, have all the sense of phenomena as causes without that reflection. If a stone falls on a man he feels it without considering anything analogous in himself forcing one thing against another. He is compelled to know of something outside, and therefore I cannot accept Dr. Newman's view. Then in one or two places where Mr. Row draws a distinction between ideal assent, or certitude and concrete assent, or actual assent, or certitude in the individual, I think he is scarcely so right as Dr. Newman, and I should be content to yield to Dr. Newman's proposition, that assent must be absolute, without agreeing with him in many of his other principles. In other parts of his paper Mr. Row is inconsistent in his arguments, and he will have an opportunity of clearing up the point if I am wrong. In his 19th section he says :—

"In one sense of the words, all conclusions are conditioned on the premises, because the truth of the conclusion is involved in the truth of the premises. This fact is expressed by the word 'therefore !' "

But in reviewing his recollection of the trial of Müller for the murder of Mr. Briggs, he says, in his 23rd section :—

"Therefore he was the murderer. I am quite unable to see how the presence of the word 'therefore' makes my assent conditional, or the taking it away involves an unconditional assent."

And Mr. Row says this, notwithstanding having previously declared that the fact of condition is expressed by the word "therefore !" I do not see how these two arguments can be reconciled. Then there is another point. In the 29th section Mr. Row says :—

"For all practical purposes, $1 + \frac{1}{2} + \frac{1}{4} + \&c.$, *ad infinitum*, is equal to 2, although I admit that to elaborate the strict metaphysics of this is very difficult."

For all practical purposes we may know that this is so, but without finding any metaphysics in the matter, I deny that $1 + \frac{1}{2} + \frac{1}{4}$, and so on to infinity, is equal to 2 ; and the arithmetic of it is not difficult, for any person understanding anything of numbers knows that it is not absolutely true. Mr. Row is aware of this, as is evident from his expression, "for all practical purposes." This is not a question of metaphysics, but of simple arithmetic, and you can-

not state the proposition without having a clear apprehension as to its meaning. Though in an equation you might as well put 2, still, as rational beings, we know that it never could be equal to 2. Again, I differ from Mr. Row in the 31st section of the paper, where he says that you can pick holes in circumstantial evidence, such as that on which Müller was fairly convicted, but that any ingenious man could do the same with no small number of mathematical demonstrations. Now, I maintain that if they are absolute demonstrations, no one can pick holes in them. If they are only approximate ones, such as that $1 + \frac{1}{2} + \frac{1}{4}, \&c., = 2$, then, of course, it may be done, and it may be shown that the conclusion is not demonstrated, but it is a mistake to say that all mathematical demonstrations may be pulled to pieces in the same way as the circumstantial evidence of a murder. Then he says in the 34th section :—

“I must adhere to the general principle, that all our convictions are absolute or contingent, according to the foundation on which they are erected.”

Dr. Newman himself would admit that, for he maintains that all our convictions are not absolute, and that therefore all our convictions are not assents. Then in the next paragraph :—

“Such certitude is not human certitude, because, as every man knows, or rather ought to know, man has not the gift of infallibility.”

Now, I do not see that there is any connection or antithesis between certitude and infallibility. A man may be quite certain, although he is not infallible. In that very passage, Mr. Row has got the definition which Dr. Rigg was not quite certain about, as to the indefectibility of certitude. Mr. Row thinks there is a confusion between an abstract conception and a concrete thing. The one great fault of a paper reasoning from such a conscientious following of another essay is, that it detracts from its clearness. As to the expression of the certitude which Mr. Row says he admits—that we all feel certain that we shall die—I can only say that it is precisely and categorically in the teeth of St. Paul's statement, that we shall not all die. Again I differ from what he says in his 41st section :—

“When reasoning confines itself to the use of symbols, its conclusions are free from some of this liability to error.”

Now Professor Whewell, in his *Philosophy of the Inductive Sciences*, and Berkeley, in his *Principles of Human Knowledge*, have both pointed out the special liability of the reasoning powers to err when using symbols. But I quite agree with the concluding portion of his sentence :—

“ . . . but the process is useless unless we can translate the symbols into notional or real conceptions.”

That no doubt is true, and yet it curiously goes with the other passage as if

they were not inconsistent. I think they are directly contradictory the one to the other. Again, in the 46th section :—

“A man possessing a moderate acquaintance with the subject, would be justified in feeling positively certain, if the *Rambler* had been discovered during the present year, and published as a work of Lord Macaulay's, that it was not his.”

Now, I do not think any literary man could speak of his conclusions as being positive certainties in such a case. It would be just possible, that Lord Macaulay might have written the *Rambler*, and if it were a fact, people would only say that it was another instance of his great versatility of style. We know that his *Lays of Ancient Rome* are very different from his staid history, or from his “Critical Essays,” and I am sure that if any one will bear in mind the differences of opinion as to the authorship of the “Letters of Junius,” he will admit that it is dangerous to speak positively as to an author's style. Of course, there may be very high probability ; but, even in our own day, we have had the theory started that Lord Bacon was the author of Shakspeare's plays. Mr. Row also tells us, that a man “*persuaded* against his will is of the same opinion still.” Now, here is a confusion of thought from using words in a wrong sense.

“A man *convinced* against his will
Is of the same opinion still.” *

Persuasion is one thing, conviction another. I would put it in this way, that a man who is convinced, but not persuaded, is of the same opinion still. If you persuade a man you take his will with you. The old-fashioned word is “convinced,” and I am quite sure, that it is more accurate than persuaded. Persuasion means bringing over the will to a certain extent only. I have only one other point, in confirmation of what fell from Dr. Rigg, that what is an intuitive conclusion of the mind is a certain mental process, although it may be so rapid that we are unable to trace its operation. In the 50th section, Mr. Row says :—

“Any person who has ever attended to the operation of his own mind, is aware, that it often happens that after one has exhausted one's self in fruitless effort to solve a point, a thought rushes unbidden into the mind which unravels the whole difficulty.”

Now, here I have had considerable experience, and do not believe that thoughts ever rush unbidden into the mind. My impression is, that they come by a purely rational process—that when the mind is quietly balanced, not eager after the point it was driving at and which it hoped to reach,—

* “He that complies against his will
Is of the same opinion still.”
Butler's Hudibras.

the reasons come and arrange themselves properly, and so you arrive at a conclusion. One who occupies himself with intricate questions must feel this, and it is as much a rational process as any in which the mind may be engaged. Let me make another remark in confirmation of Dr. Rigg. I do not believe that some human beings are endowed with an intuition which others have not, and the illustrations which Mr. Row gives on the subject of memory where he agrees with Dr. Newman, form one of those cases in which I disagree with both. In his 54th section, he says :—

“Dr. Newman tells us of a person who could enumerate in exact order the names on all the shops from Hyde Park Corner to the Bank.”

Now, if that were true, the man must have devoted his attention to learning it by rote. I am sorry to have taken up so much time, but this is a paper of considerable importance, and I have been compelled to pass over many points in order to bring my remarks within even these limits. (Cheers.)

The CHAIRMAN.—My duty as Chairman compels me to trouble you with a few remarks on what has already been said. I will leave Mr. Row to fight his own battle with Mr. Reddie, whose able criticisms must be met by the author of the paper himself, but I do want to make one or two observations on what has fallen from Dr. Rigg, and on the correct way he has hit the difficulty which we find in understanding and appreciating Dr. Newman. Dr. Newman, as has already been pointed out, carefully avoids defining terms ; and the non-definition of terms is an element in which the sceptical monster very much delights. He delights in wallowing in the mud of undefined terms. As to the point about lucern being *medicago sativa*, that is not, strictly speaking, a proposition at all ; it is a name meaning this, that in one language lucern is known as *medicago sativa*. There is no reason why it should not be *bellis perennis*, except that it seemed good to Linnæus, when he wanted to specify it, to use the sound *medicago sativa*, instead of calling it “lucern.” But that is very different from saying it is *medicago sativa*. Then, as to the words “certainty,” “certitude,” and “assent.” “Certitude” and “certainty” are words in respect to which some difficulty has arisen, as has been alluded to by those who have spoken. Now, I remember when I began to learn logic, I was taught that there were two kinds of certitude, *alia rei*, *alia personæ*—one of the thing, another of the person ; of the thing when it is absolutely true, of the person when he is sure it is true. Now these are very different things ; for the person may be sure it is true, and it may not be, or the reverse. People suppose that you cannot be sure of a probable proposition, but you can be certain of it as a probable proposition. Thus, the proposition A is likely to be B, is a probable proposition, and, so far as your mind goes, it is as good a certainty as that the earth turns round the sun, or any other certainty of your own existence. We may find in Dr. Newman’s own work a sort of hint at a solution of the difficulty about “assent” and “certitude.” I speak at a disadvantage, for I have not read,—

I have only perused,—the *Essay in Aid of a Grammar of Assent*, but I have collected one thing from it—the entirely sceptical character of Dr. Newman's philosophy. Mr. Row says that “the whole of Dr. Newman's observations are based on a confusion of thought which we should have hardly imagined possible in such a man.” So far from imagining it hardly possible, I think it extremely possible and probable. His object is to involve us in this difficulty : either you must have an infallible external authority, or you can have nothing at all. What is all this to bring us to, as a grammar of assent ? Is it to the decrees and catechism of the Council of Trent, or to the *Homo Apostolicus* of Liguori ? Dr. Newman draws a distinction at the outset between assent to a proposition as a proposition, and as being true. There is a difference between assenting, intelligently, to the proposition that all A is some B, and merely accepting the proposition A is B. You may assent to the proposition that A is B, without understanding it at all ; you may put it in Chinese, if you accept it as true, and assent to it. Now Dr. Newman tries to confuse the mind between these two kinds of assent—the intellectual and understanding assent, and the blind accordance of those who give their assent to an infallible authority without understanding the terms in which the proposition is couched. You need not accept the terms as absolutely true—you may accept them as probably true,—but in either case you accept the proposition on authority, and not necessarily because you understand it. That is the result which Dr. Newman wishes to arrive at, but he has merged into one the two kinds of assent,—the theoretical and the practical. We take up in science a theoretical certainty—we take up an unconditional proposition as being demonstrated. But since most of the propositions with which we have to deal have reference to our action here, we assent, in non-scientific matter, to a proposition not theoretically but practically, and arrive not at a theoretical, but at a moral conclusion, which is enough to act upon. We take the proposition that A is B. Some A is probably some B, and we say to ourselves, that though it is not absolutely true that all A is some B, yet for the purposes of our action we may act as if it were absolutely true, although we know the real fact is that some A is probably or possibly some B. We accept an inferior kind of truth as sufficient to act upon, and get, not theoretical, but moral certainty. If we draw this distinction between theoretical assent and practical assent and moral certainty, we shall be in no danger of falling into the conclusion into which Dr. Newman would have us glide, that there is no resting-place between utter scepticism on the one side, or that infallible external authority to which he wishes to bring us on the other. (Cheers.)

Mr. Row.—I have two strong allies outside this room. One is the *Edinburgh Review*, in which an essay on this subject has appeared. I had written my paper before I saw it, but I find that that essay and my paper are substantially agreed upon all first principles ; the other is the *London Quarterly*, which has also appeared since my paper was written, and there again I find that we are substantially agreed upon all first principles. We cannot mistake the first

principles of Dr. Newman's book which I have brought before you ; and I am certain that they contain the inherent principles of scepticism. When you consider that Dr. Newman's book contains 300 pages of scientific matter, you will readily understand that it is very difficult to represent it properly within the short compass of thirty pages. I could have written several papers on the book far more easily than I have written this one. But there is another thing which has had some influence in making my paper more obscure, and that is, my determination not to touch upon the immense number of theological illustrations with which Dr. Newman's book is full. Take one of them—connected with notional and real belief. He tells us that Spain—and I think Italy—and two or three of the most degraded nations of Europe, give a real assent to these truths, whereas I cannot give anything but a notional assent. It is unspeakably impudent to say that the more degraded the people of a Roman Catholic country, the more real is the assent given to religious truth, while the more a man is enlightened the less real is his assent. However, I do not think it fair to look at Dr. Newman's book theologically ; but I own that any one reading it for a first time will be rather caught by it, because there is a speciousness in it until you analyse it, and then the mischief comes out. The more you analyse it the more you will be dissatisfied with its principles, philosophical and religious. I am happy to observe that none of the arguments which have been used in this discussion touch any material point in my paper. First, as to the point dwelt upon by Mr. Titcomb with regard to a man being certain a hundred times. He mistakes the question. The essence of the point is, that however many times a man may have been in error, even up to a hundred times, and however often error is proved against him, he has as good a right to his hundred and first conviction as if he had never made a mistake before. Now, I say that the man who does that is wanting in the grace of humility. If I had been in error a hundred times, and were as confident as ever on the hundred-and-first occasion, I think I should be very wanting in modesty. It is not a case of a man being one, or two, or even three times wrong, as Mr. Titcomb supposes : but even then a man ought to have his confidence in the certainty of his conclusion somewhat abated. Let me go once more into the philosophy of this question. The essence of Dr. Newman's book is founded on the absolute character of assent, and, as he infers also, the absolute character of certitudes. The position which I have taken is, that assents are not absolutely given, and I differ from Dr. Rigg in thinking that we have absolute certitudes, in the sense in which I understand the word "absolute." Taking the abstract idea of certitude, I hold that it cannot admit of degrees ; but in the ordinary language of mankind, we speak of being more or less certain. In fact, all my certitudes are relative to the evidence on which they rest ; but Dr. Newman wishes to separate between certitude and rational connection, and connection and the evidence on which it rests ; in fact, his object is to enable us to arrive at a certitude with no other evidence than that of having authority to support it. But he even

goes further, and says that our reasonings and conclusions in the most necessary matters do not amount to certainties, but are merely probabilities, and that the conclusion of a proposition in Euclid is after all a mere verisimilitude. Now, I hold, that Dr. Newman has confounded between two senses of the word "conditioned." I readily admit that the conclusion of a proposition in Euclid is conditioned on the premises from which it flows ; i.e., that—a fact which is expressed by the word "therefore"—the conclusion is contained in the premises. But as these are in necessary matter, the conclusion viewed in itself is not conditioned but absolute ; or, in other words, is as necessary as the premises. It is simply conditional *quod* the word "therefore" ; but this is quite another thing from saying that the three angles of a triangle are equal to two right angles,—a proposition to which I in any sense yield a conditional assent. But Dr. Newman says, that all conclusions are conditional *quod* conclusions ; and then he invents a new process of the mind by which we give an absolute assent to them. I need scarcely point out that this is done to supply a standing-point for his theological leanings. Thus by a kind of legerdemain, an unconditional assent may be given to propositions for which the evidence is worthless, or nearly so. I regret to say, that it seems to me to be the great object of this treatise to invent something which will constitute an apparent stand-point for this most sophistical conclusion. Now, I hold that our certitudes are in some degree relative also ; and that all I am certain of is relative to all the other powers of my mind, and to the evidence on which it rests, and although I may forget that evidence, yet I can remember the nature of it. Now, Mr. Titcomb seemed to think that a certainty can rise higher than the evidence on which it is based, and he took several instances of the works of design as proving the being of a God. Now, in my paper, I have insisted on the value of what I should call the convergence of evidence into one common focus. Such evidence is not a mere balance of probabilities. The nature of it is this, that we have a number of separate lines of absolutely distinct evidence which converge in a common centre ; and when that is the case, there is some principle in the mind—I do not know what it is—which accepts that proof as absolutely valid, and the evidence is quite as suited to produce belief as what we call demonstration. Now, as to my admission that there are certain powers of mind possessed by individual persons which may be said to be intuitions. When I wrote that, I intended to express no opinion of my own, I merely took what Dr. Newman said upon it, and my point was that even if that were true, it did not in the least prove his argument. I am far from being satisfied as to what is the correct view of the matter. He has alluded to Napoleon's special power of looking at an army through a glass, and at once forming a correct judgment as to their numbers and positions. Cases like that, at any rate, strike us ordinary people as strange, and whether they be the result of intuitions, or of very rapid judgments, I do not know ; but in using the phrase "intuitive," I did not mean to imply an absolute intuition, but simply the wider sense of the word as it is used by Dr. Newman, and as it is often applied. I have no doubt I have simply fallen

into the use of the word because I found it in that part of Dr. Newman's essay to which I was referring. It seems to me, however, to be one of the characteristics of great men, that they are able to form judgments on data which would suggest little or nothing to ordinary minds. Of this there are many recorded instances. How this is done is a mystery which we cannot penetrate. We know, however, that absolute mastery of a subject enables us in some degree to approximate towards it. If we call it a power of profound insight, it explains little. Probably mental processes take place which leave no trace in the memory. There is no doubt that great conversance with a subject enables one to pass through a succession of judgments and to draw conclusions which to others seem incomprehensible.

Rev. G. HENSLow.—Amongst the writers who have dealt with that point are Robertson, of Brighton, and the author of *Ecce Homo*.

Mr. REDDIE.—I hardly think such authorities can carry great weight with us. They are both sceptics. Robertson gave several hints for the *Essays and Reviews*, and the character of *Ecce Homo* is well known.

Mr. HENSLow.—It is only a question of fact.

Mr. Row.—But these are mere subordinate matters, about which I did not care one way or the other. With regard to those points, upon which I may say our religious and philosophical certainties rest, if Dr. Newman is right in his main principles, we have little to do but to turn sceptics. I am very sorry to be obliged to come to that conclusion. There is one remark of Mr. Reddie's with which I wholly disagree—as to the judgment of style. In the case I mentioned I should be positively sure that Lord Macaulay did not write the *Rambler*; but perhaps Mr. Reddie has not studied critically the evidence which style furnishes to diversity or identity of authorship. It is a difficult question to know how we form that judgment; but there are diversities of style which make you feel sure that one book could not have been written by a certain author. What do you think on the point, Dr. Thornton?

The CHAIRMAN.—No doubt there are certain differences of style which are easily detected. For instance, one would not think that the *Facetiae* of Hierocles was written by Thucydides.

Mr. Row.—No; of course not. The *Rambler* is full of Latinisms, whereas Macaulay's writings contain a great amount of Saxon, and there are few styles which are more widely different. Mr. Reddie seemed to argue that there were no metaphysical difficulties in the summation of an infinite series. When I wrote that, I had in my eye many other mathematical operations, and I maintain that the square root of a minus quantity does include certain metaphysical difficulties. I do not say that all mathematical questions involve this difficulty, but some do. Take the differential and the integral calculus; there are metaphysical difficulties there, as also in many other cases. But I will not further occupy your time.

Dr. Rigg.—If Mr. Reddie would favour us with a paper upon Dr. Newman's work, but deprived of such mathematical matters, I think he would do good service.

The Meeting was then adjourned.

INTERMEDIATE MEETING,* JANUARY 30, 1871.

JAMES REDDIE,† ESQ., HONORARY SECRETARY, IN THE CHAIR.

The Minutes of the last meeting were read and confirmed.

The CHAIRMAN explained the object of the intermediate meetings, of which this was the first.

The Rev. J. H. TITCOMB then delivered a lecture "On Archæology, with some of its Parallels and Contrasts," illustrated with diagrams.

A discussion ensued, in which the Rev. C. A. Row, the Rev. J. B. Heard, Captain F. Petrie, Mr. A. V. Newton, Mr. R. W. Dibdin, the Rev. C. P. Sheppard, and the Chairman took part, after which—

The meeting was adjourned.

* See Mr. Reddie's statement, page 44.
VOL. VI.

† The late.

ORDINARY MEETING, FEBRUARY 6TH, 1871.

THE REV. C. A. ROW, M.A., IN THE CHAIR.

The Minutes of the last, intermediate, Meeting were read and confirmed.

The following elections were announced :—

MEMBERS :—Rev. William Cadman, M.A., Rector of Holy Trinity, Marylebone ; R. S. Falconer, Esq., Clarence Road, Clapton Park ; Henry Shersby, Esq., 3, Samuel Street, Woolwich ; Gregory Seale Walters, Esq., 12, Chester Terrace, Regent's Park ; A. G. Yeates, Esq., Collinson House, Effra Road, Brixton.

ASSOCIATES,* 1ST CLASS :—Joseph Hiles, Esq., Irene, Clifton Road, West Derby Road, Liverpool ; Neil Smith, Esq., Jun., A.M., 14, Carlton Place, Aberdeen ; Francis Edmond, Esq. (Advocate), 5, Albyn Place, Kingswell, Aberdeen.

ASSOCIATE, 2ND CLASS :—John Allen, Esq., Long Acre, London.

Also, the presentation of the following works for the Library :—

“Proceedings of the Smithsonian Institution of Washington, 1868.”

From the Institution.

“Commerce and Navigation Reports of the Government of the United States, for 1868-69.”

Ditto.

“Proceedings of the Amsterdam Conference.”

From Rear-Admiral E. G. Fishbourne.

“Black Diamonds.” By the Rev. H. H. Bourn.

From the Author.

“Christ in the Pentateuch.” By the same.

Ditto.

“Prayer Meeting Addresses.”

From Neil Smith, Esq., Jun.

“Thoughts on Religious Subjects.”

Ditto.

“Truths of the Bible.” By the Rev. B. W. Savile, M.A. *From the Author.*

The Author being absent on account of illness, Dr. J. A. Fraser then read the following Paper :—

* At a Special General Meeting, held December 4, 1871, it was resolved that the list of 1st Class Associates should be amalgamated with the Members.

**ON THE EVIDENCE OF THE EGYPTIAN MONUMENTS
TO THE SOJOURN OF ISRAEL IN EGYPT.** By the
REV. B. W. SAVILE, M.A., A.V.I.

1. **T**HE value of Egyptology, like that of Archæology in general, as seen in the Himyaritic, Cuneiform, and Semitic inscriptions which have come to light, is proved by the confirmation which it affords to the truth and integrity of Scripture, and especially to the earlier portions of it, relating to the history of the Israelites in Egypt. Bishop Colenso has gone so far in his criticism on the *Pentateuch* as to declare that :—

“ All the details of the story of the Exodus, as recorded in the Pentateuch, again and again assent to propositions as monstrous and absurd as the statement in arithmetic would be, that two and two make five. There is not the slightest reason to suppose that the first writer of the story in the Pentateuch ever professed to be recording infallible truth, or even actual historical truth. He wrote certainly a narrative. But what indications are there that he published it at large, even to the people of his own time, as a record of matter-of-fact, veracious history ? ” (*The Pentateuch Critically Examined, etc.* Part II., pp. 370, 5.)

2. Hence Bishop Colenso denies the assertion of his brother critic, Dr. Ewald, who affirms, in his *Geschichte des Volkes Israel*, that “ the historical existence of Moses is indubitably proved,” and refuses to acquiesce in the sober conclusion of the late Dean Milman, that “ all attempts to assign a *later* period for the authorship (of the Pentateuch) or even for the compilation, though made by scholars of the highest ability, are so irreconcilable with facts, so self-destructive, and so mutually destructive, that I acquiesce without hesitation in their general antiquity.”

3. Believing that the history of Israel has received valuable aid in confirmation of its veracity from the recent interpretation of the Egyptian monuments, I propose to turn to such an unexceptionable source of authority in order to show the harmony between the two. It is not necessary to discuss at any length the mode by which the hieroglyphic inscriptions

have been rendered useful to Biblical students. It will be sufficient to mention that the decipherment of the Rosetta stone * in the British Museum was first attempted by our countryman Dr. Young, about sixty years ago; and that the system which he inaugurated has been established by the genius of the two Champollions, De Rouge, Mariette, Chabas, and Daveira, amongst the French; Lepsius† and Brugsch amongst the Germans; and of Englishmen the not less distinguished names of Birch, Renouf, Goodwyn, and others, who have contributed their share to the chief philological triumph of the present day.

4. I would remark, in passing, that Egyptology is valuable for chronology as well as for history. The former is too long a subject to be discussed in this present paper, as it should be treated separately; but I have no hesitation in expressing my belief, after a prolonged investigation of the matter, that the chronology of the Bible as computed from the Hebrew, may be proved to be in complete harmony with that which may be deduced from the monuments and papyri of Egypt.

5. My present object, however, is to confine myself to those incidents recorded in Scripture relating to the children of Israel during their sojourn in Egypt from the time of Abraham downwards. And the first proof I would adduce on this subject, though of the negative order, affords a striking instance of the rashness with which a certain class of critics are apt to impugn the integrity of the Bible.

6. Von Bohlen, a distinguished German writer, considered that the fact of the Pentateuch having represented Abraham as receiving "sheep and asses" from Pharaoh, was sufficient to prove its *unhistorical* character, as he says in his *Die Genesis historisch-critisch erläutert* that "sheep were unknown to the Egyptians at that period, and asses were especially odious to them on account of their colour." In reply to this crude objection, without laying any stress upon Manetho's testimony

* This monument, which was originally set up in a temple at Memphis, dedicated to *Tomos*, "the setting sun," and built by the *Pharaoh-Necho* of Scripture, was discovered in the year 1799 by M. Boussard, an officer of Bonaparte's army in Egypt. The battle of Alexandria placed it in the hands of the British. It bore a trilingual inscription; the upper one in hieroglyphic, the centre in enchorial, and the lower in Greek, from which it appeared that the inscription was in honour of Ptolemy Epiphanes, who reigned B.C. 205-181.

† The recent discovery of another trilingual tablet at *San* (possibly the same as the Biblical "Zoan"), by Professor Lepsius, greater in its extent, and half a century older than the Rosetta stone, is considered of much value as throwing additional light upon the present state of hieroglyphic literature.

that "the goat" was worshipped at Heliopolis, as early as the time of the second dynasty, *i.e.* two centuries before Abram's arrival in Egypt, or that Herodotus, Diodorus, and Plutarch severally mention the existence of *sheep* in that country, it will be sufficient to point to an inscription on a tomb, discovered by Sir Gardner Wilkinson, bearing the name of Pharaoh *Chu-fu* of the Great Pyramid, according to the custom of the Egyptians, and therefore proving it to be prior to the time of Abraham, in which the head shepherd of Prince *Chephren*, the nobleman buried there, is represented as giving an account of the flocks committed to his charge, which are seen following him. First come the oxen, over which is inscribed the number 835; cows, 220; goats, 2,235; *asses*, 760; and *sheep*, 974.

7. Notwithstanding such a rebuff, Von Bohlen did not hesitate to declare in his comment upon *Genesis* xliii. 16, that "The author of that book represents Joseph commanding his servants to prepare flesh for food *in most manifest opposition* to the sacredness of beasts among the Egyptians; their hatred to foreign shepherds being founded on the inviolableness of animals, especially of *sheep*, which were killed by the shepherds, but accounted sacred by the Egyptians," forgetting that he had just before asserted there were *no sheep* at all in that country! Such is the inconsistency of those who are opposed to the veracity of Scripture in this age of criticism and progress.

8. In a somewhat similar strain Professor Huxley, in his address to a body of the clergy at Sion College in 1867, endeavoured to prove, if I understand him aright, that "a great interval must have elapsed," much longer than the Bible allows, between the times of Abraham and Joseph, because the latter is represented as riding in a chariot, which implies "horses," whereas in the time of the former, he says, "there existed a people highly civilized, but with whom are no traces of chariots or domestic horses." I do not quite see the force of this argument, nor why we are to suppose "a great interval" between the two periods on that account; but I think we may learn something from the monuments on this very subject, which certainly tends to confirm the historic truth of the Bible more than the contrary. We gather from the tomb inscriptions already mentioned, as well as from the list of the gifts bestowed upon Abraham by Pharaoh, that at the time of his sojourn in Egypt horses were evidently unknown to the Egyptians, or they would doubtless have been enumerated with the other animals comprising the stock of Prince *Chephren*, the owner of the tomb, as well as in the presents bestowed upon the Patri-

arch of the Hebrews. Two centuries after Abraham's visit to Egypt, Joseph was made to ride in Pharaoh's chariot, from which we conclude that during the interval horses had been introduced into the country. Now the first sign of horses on the monuments, as far as is yet known, appears to be during the reign of Thothmes I., who is said to have reared a particular breed of horses in the meadows of Lower Egypt. And as this Pharaoh was the son of the king "which knew not Joseph," according to the Book of Exodus, we may conclude that at some period between the times of Abraham and Joseph they had been introduced into Egypt; probably by the first of the Shepherd kings.

9. From the fact that the sacred writers always speak of the King of Egypt under the generic term of "Pharaoh," instead of the name of the reigning sovereign, with but two exceptions, and those a thousand years after the exode of Israel, we have an additional difficulty in identifying the various Pharaohs mentioned in the Pentateuch. Nevertheless certain things have been recently brought to light which will assist us in our investigation of the subject.

10. Thus Josephus (*Antiq. Jud.*, I. viii. 6), who lived when the Temple records of Egypt still existed, and who would not have ventured, in the presence of his keen opponents of Alexandria, like Appion and others, to state anything without good grounds for his assertion, relates that "Abraham taught the Egyptians arithmetic and the science of astronomy, as before he went down to Egypt they were unacquainted with that sort of learning." And so Eupolemus (apud Euseb. *Præp. Evang.*, § 9), who flourished three centuries before Josephus, affirms that "Abraham was the inventor of astrology and the Chaldæan magic, and on account of his exalted piety was esteemed a god." Now, how far does this agree with what may be learnt from the monuments?

11. Osburn, in his *Monumental History of Egypt* (I. ch. vii.), says there is not a single record of any Pharaoh, or subject with a date previous to the time of Amenemes I., whereas tablets belonging to his reign with dates inscribed upon them are not uncommon. In the sepulchral grottos of *Bennee Hasan* on the banks of the Nile, there are still to be seen some inscriptions belonging to this Pharaoh and his immediate successors. Special mention is there made of the *Panegyry*, or *Festival of the First Year*; referring, as it is supposed, to the commencement of the "Tropical Cycle;" i.e., a perfectly exact cycle of the sun, moon, and vague year, which the Astronomer Royal fixes B.C. 2005 (Pool's *Horæ Ægypt.*, Pt. I. § 11). Now inasmuch as the Hebrew chrono-

logy places Abraham's visit to Egypt B.C. 2010,* are we not warranted in considering that the inscriptions on the monuments of Bennee Hasan, compared with the statements of Eupolemus and Josephus, prove an important synchronism between the histories of Israel and Egypt?

12. If the monuments afford any testimony to the truth of Scripture respecting the life and times of Abraham, still more clearly do they speak respecting his great grandson Joseph, who was promoted from a prison to be the second ruler in the kingdom of Egypt. Julius Africanus, a writer of the third century, mentions that Joseph went to Egypt, and was raised to power under one of those Pharaohs who belonged to the "Shepherd dynasty." Syncellus, a Byzantine historian of the eighth century, says, "All are agreed that Joseph governed Egypt under Pharaoh *Apophis*, and commenced in the seventeenth year of his reign." What has hitherto only been supported by tradition is now confirmed by the monuments; so that the assertion of Joseph being Viceroy of Egypt under Pharaoh *Apophis* is as much an historical fact as that Sejanus was prime minister to Tiberius in ancient, or William Pitt to George III. in modern times.

13. Before endeavouring to show how this is the case, it may be right to notice an objection which is frequently brought against this opinion. As we read in the 46th chapter of Genesis, that in the time of Joseph "every shepherd" was considered "an abomination unto the Egyptians," it has been naturally argued that a native Pharaoh would not have promoted Joseph, who was of a shepherd race, to be second ruler in his kingdom, and therefore that Joseph could not have been viceroy during the rule of the shepherds in Egypt. But it is doubtful whether our English version conveys the exact sense of the original; as it is clear that Joseph, before introducing his brethren to Pharaoh, prompted them to avow that they were in reality *shepherds*, "from our youth even until now, both we and our fathers," in order that Pharaoh might give them "the best of the land (*viz.*, *Goshen*) to dwell in;" which the king at once consented to do. Now all this can only be explained upon the principle that the shepherd dynasty at that time was reigning in Egypt. The progress of hieroglyphic discovery has not confirmed the common

* Osburn supposes that Abraham's visit to Egypt was during the reign of Pharaoh *Acthoes*, the last king of the eleventh Dynasty; and it is certainly remarkable that the *first* intimation of the Egyptians practising the rite of circumcision, is found in an inscription as early as the eleventh Dynasty, where the circumcision of the *Sun-god* is mentioned.

opinion of the "shepherds" having been so odious to the Egyptians as our translation supposes. M. Mariette concludes, from his recent discoveries at Tanis, the Scripture "Zoan," that "the shepherds have been too severely judged;" affirming that "the temple of *Sutech*, built by *Apophis*, was ornamented and enriched with images of those Pharaohs of whom the shepherds are accused of destroying all but the remembrance." (*Revue Archæol.*, ii. 104.) The doubt of the correctness of our English version rests upon the word translated "abomination." It is true that *toyabah* has this meaning; but it is equally certain that of the ninety times in which the word occurs in the Old Testament, it far more frequently signifies "idols," or objects of worship with the heathen, which were necessarily "abomination" to Jehovah; as in 2 Kings xxiii. 13, the idolatry of the children of Ammon is described by the same word, and translated "abomination." Moreover, if we take the *unpointed* Hebrew as a guide to determine the meaning of the text, the word *royah-tson*, rendered "shepherd," means likewise "consecrated goat;" so that the passage equally reads, "every consecrated goat is an idol or object of worship with the Egyptians." That such was the case is well known from the testimony of Manetho, who says, that as early as the second dynasty, and centuries before the Israelites were seen in Egypt, "The bulls, Apis in Memphis, and Mnevis in Heliopolis, and the Mendesian goat, were appointed to be gods." (*Euseb. Chron. Can.*, lib. prior, cap. xx.)

14. All this tends to support the truth of the tradition that Joseph was Viceroy of Egypt under Apophis, the most distinguished of the Shepherd kings; and which, I think, is further confirmed by Pharaoh at once recognizing the God of Joseph, as soon as he had interpreted his dream, which the Magi were unable to do. And Pharaoh said to Joseph, "*Forasmuch as God has showed thee all this*, according unto thy word shall all my people be ruled; only in the throne will I be greater than thou." How can we account for this sudden recognition on the part of Pharaoh, of the one only God, as distinct from the idol-gods of Egypt? A fragment of one of the hieratic papyri in the British Museum, entitled *Sallier* No. 3, containing contemporary history of the Hyksos, or Shepherd dynasty, throws much light on this subject. The passage reads as follows:—

"It came to pass when the land of Egypt was held by the invaders *Raskenen* was ruling in the South, and Pharaoh *Apophis* was in his palace at *Avaris*. *The whole land paid tribute to him* with their manufactures and all the precious things of the country. Pharaoh *Apophis* had set up *Sutech* for

his lord ; *he worshipped no other God in the whole land.* While Apophis was celebrating the dedication of his temple to *Sutech*, the ruler of the South prepared to build a temple in opposition."

15. This noticeable fact of Pharaoh Apophis having been devoted exclusively to the worship of *Sutech* has been confirmed by Mariette's discovery of a colossal statue at Avaris with this inscription on the right shoulder :—

Pharaoh Apophis, worshipper of the God Sutech.

Hence, as Dr. Brugsch well observes :—"The mention of this god in combination with the Shepherd king, proves most clearly what is stated in the papyrus concerning Apophis having been specially devoted to the worship of this god to the exclusion of all the other deities of the whole country." (*Histoire d'Egypt*, p. 79.)

16. Who then was this *Sutech*, the god of the shepherds ? It appears that he was the national god of Syria ; and Pharaoh's recognition of Joseph being enabled to interpret his dream by the aid of the Syrian god accords with the words of Moses—"A Syrian ready to perish was my father, and he went down into Egypt and sojourned there with a few, and became there a nation great, mighty, and populous ; and the Egyptians evil entreated us, and afflicted us, and laid upon us hard bondage." (*Deuteronomy* xxvi. 5, 6.) Dr. Birch of the British Museum, one of the greatest of living authorities in Egyptology, considers that *Sutech* denotes "the one only God, as distinct from all other deities ;" which serves to explain an inscription at Thebes, of the son of Ramessu the Great, Pharaoh Manepthah, who is represented as worshipping "the God Sutech of Avaris." As Ewald in his *Geschichte des Volkes Israel*, p. 450, asserts that *Avaris* means philologically nothing less than "the city of the Hebrews ;" and De Rougé gathers from the Egyptian monuments that Avaris is the same as Tanis, or the Scripture *Zoan*, which in Hebrew signifies "motion," and is the proper equivalent for *Hawar* or *Avar*, "the place of departure" from which the Israelites went forth at the time of the Exodus (*Revue Arch.*, 1861, p. 250), we may interpret the inscription "the God Sutech of Avaris," as signifying in reality "*Jehovah the God of the City of the Hebrews.*"

17. It is curious to trace the changes which the worship of *Sutech* underwent during the four centuries which intervened between Pharaoh Apophis and Pharaoh Manepthah. On the expulsion of the shepherds from Egypt, which took place shortly after the death of Joseph, *Sutech* assumed another

form and meaning. Considered as an opponent of the gods of the country, his name was destroyed on almost all the monuments. An ass was to the Egyptians the type of their Northern enemies in Syria, so Sutech was represented with the head of *an ass*; the Egyptian name of which *Tao*, being the same word as the Greeks employed to designate "the God of the Hebrews." Hence Diodorus relates that when Antiochus Epiphanes, B.C. 170, entered the Temple on Mount Zion, "he found the figure of a man carved in stone sitting on *an ass*, whom he took for Moses who built Jerusalem." (Lib. xxxiv. *Frag.*) Regarding this extraordinary statement as only a gibe of the Greek historian, it is remarkable to see how the early Christians were mocked in a similar way. Amid the ruins of Hadrian's palace at Rome (A.D. 117-138), there has recently been discovered a representation of a human figure crucified *with an ass's head*, with this inscription beneath—*Alexaminos adores his god*. And Tertullian writes at the close of the same century—"A new report of our God hath been lately spread in this city (Rome) since a wretch issued a picture with some such title as this—*The God of the Christians conceived of an ass*." (*Apol.*, ch. xvi.) After a time *Sutech* came to be regarded by the Egyptians under a different aspect. M. Mariette has discovered a monument in Egypt, showing that Ramessu the Great made use in one instance at least of a chronological era, reckoned from "Noubti," one of the earliest, if not the first of the Shepherd Kings; by which time *Sutech* had been admitted into the Egyptian Pantheon, just as Tiberius proposed that Christ should be admitted into the Roman. Hence we find the Temple of Abou-Simbel was dedicated by Ramessu the Great to the four principal deities of Egypt at that period of history, viz., Ammon, Phthah, Ra, and *Sutech*.

18. Although the Himyaritic inscriptions and the Chinese archives bear testimony to the truth of the Mosaic record respecting "the seven years' " famine in the time of Joseph, no Egyptian monument has yet been discovered which refers to it. In the life of the late Baron Bunsen, mention is made of the delight with which he received a communication, in 1853, from Dr. Birch, with the decipherment of a hieroglyphic inscription, a portion of which read as follows:—"When in the time of Sesertesen I. *the great famine prevailed in all the other districts of Egypt*, there was corn in mine." Bunsen hastily pronounced this to be "a certain and incontrovertible proof" of the seven years' famine (*Egypt's Place*, etc., iii. 334). Dr. Brugsch considers Bunsen's conclusion "impossible for reasons chronological." (*Histoire d'Egypte*, p. 56.) With this I

cordially agree; for independently of the fact that the reign of Sesertesen I. preceded that of Joseph's Pharaoh by about two centuries, if we note what is said in Scripture respecting the seven years' famine, we shall at once see the distinction between the two. In *Genesis* xli., 54, it is written "The seven years' dearth was *in all lands; but in all the land of Egypt there was bread.*" It is clear that the two statements cannot record the same event; for whereas the monumental inscription speaks of a great famine extending *over all Egypt, save one district*, Scripture relates that the seven years' famine was *in all lands but Egypt*. No two descriptions can be more unlike.

19. Another instance of Bunsen's misapprehension of Scripture has been very decisively contradicted by the monuments of Egypt. The Book of Genesis closes with the assertion that Joseph died at the age of 110. Bunsen declares that "the 110 years of Joseph could not be historical," affirming that his real age was probably not greater than 78. (*Egypt's Place*, etc., iii. 342.) Now, there is reason to believe, that after the time of Joseph, the limit of longevity was considered by the Egyptians to be just 110 years; and that the desire of attaining that age became quite proverbial amongst them; which may be accounted for by the esteem which they entertained for the memory of Joseph. By the help of the monuments and papyri we can trace through several centuries repeated references to the number "110 years;" which seems to show that such was the case. Thus, in the British Museum, an inscription belonging to a court officer, named *Rakia*, of the time of Ramessu the Great (14th cent. B.C.), reads:—

"Adoration to Onnophris, who granted me repose in the tomb *after 110 years on earth.*"

In the Munich Museum, on a statue of *Baken-Konsoro*, high priest of Ammon, in the time of Pharaoh Seti (15th cent. B.C.), the inscription contains a prayer, that Ammon would grant his servant "*the happy life of 110 years.*" A second inscription in the British Museum, on a black stone, carved in hieratic in place of the usual hieroglyphic characters, dated the 21st year of Amenophis III. (16th cent. B.C.), speaks of certain benefactions which are promised to the objects of the charity—"during the days when they shall repose in the tomb *after 110 years.*"

20. Similar references to this limit of longevity amongst the Egyptians are frequently found in the papyri which have come to light; the most interesting of them being in a papy-

rus brought by M. Prisse d'Avenues from Egypt about thirty years ago, and now in the *Bibliothèque Nationale*, at Paris. An extract from it reads as follows:—

“ Verily, a son, who obeys his father and does what is right, is pleasing unto God. So shalt thou have health and long life, and the royal approbation in all things. Thou shalt attain *the age of 110 years* in the King's court among the nobles of the land.”

As this papyrus appears to have been written during the reign of Pharaoh Assa (18th cent. B.C.), the last of the Shepherd Dynasty, which was ruling at the time of Joseph's death, and is the earliest instance, as far as is known, of any reference to “ the age of 110 years ” as being proverbial amongst the Egyptians, we are warranted in regarding it as a clear testimony to the truth of the Scripture statement respecting the age of Joseph at the time of his death.*

21. The Book of Exodus opens with the statement that after the death of Joseph and his brethren, “ there arose up a new king over Egypt, which knew not Joseph,” and who commenced the affliction of the Israelites, by compelling them to build the treasure cities *Pithom* and *Raamses*. I believe it to be as certain an historical fact that the “ king which knew not Joseph ” was Amosis, the head of the 18th Dynasty, and conqueror of the shepherds, as that our William I. was the hero of the Norman conquest. Chronology and history alike point to this conclusion with an amount of evidence that is simply overwhelming. Hence we may expect to find on the monuments the names of “ Pithom ” and “ Raamses ” at that period of Egyptian history. Nor are we disappointed. The name “ Pithom ” has been identified by Dr. Brugsch with the *Pâ-chtoum en zâlou*, i.e., “ the treasure city or fortress of Thom, built by foreign captives.” The name occurs in the 6th Tableau of the grand Hall in the Temple of Ammon at Karnac, in the time of Pharaoh Seti (Brugsch, *Hist. d'Égypt.*, p. 129); and also two centuries earlier, in the annals of Thothmes III., grandson of the Amosis referred to before (Brugsch, *Geograph. Inscript.*, iii. 21); and there can be little doubt but that it is the identical treasure city *Pithom* built by the children of Israel.

* From a further consideration of what Mariette and Chabas have written on this subject, I am led to think the evidence conclusive that the Pharaoh referred to in the Papyrus Prisse belongs to the fourth Dynasty, and not to the last of the Shepherd kings. But this does not affect the argument respecting the age of Joseph; for the son who is of the age of 110 appears to have a father living at the time.—*March*, 1872.

22. Respecting the name of "Raamses" or "Ramesses," as it is generally written, M. Chabas, a distinguished French Egyptologist, regards it as a proof that the "king who knew not Joseph" must refer to Ramesses I. or his grandson, Ramessu the Great; when the name of Ramessu is first met with amongst the Pharaohs of Egypt. But this is a mistake. If we regard the Hebrew mode of spelling the name we find it written *R H M S S*, and pronounced probably *Ramess*. So on the monuments, we find a name exactly like it at this very period of history, and in a position which would naturally account for one of the "treasure cities" being called after him. The name of one of the sons of the "king who knew not Joseph" reads *Ra-M S S*, whereas the Pharaohs of the house of Ramesses, which reigned two centuries later, have the final *u* generally speaking at the end of their name; so that the exact way of rendering it in English would be rather *Ramessu* than *Raamses*, or *Ramesses*. And thus it appears that the Hebrew name as it is written in Exodus i. 11, is more like the son of Amosis, which is thus inscribed on his cartouche, "*The king's son Ra-M S S ever living*," than that of the subsequent line of Pharaohs. (*Königsbuch der Alten Aegypter*, von C. Lepsius, Tafeln xxiii. xxx.-xxxiii.)

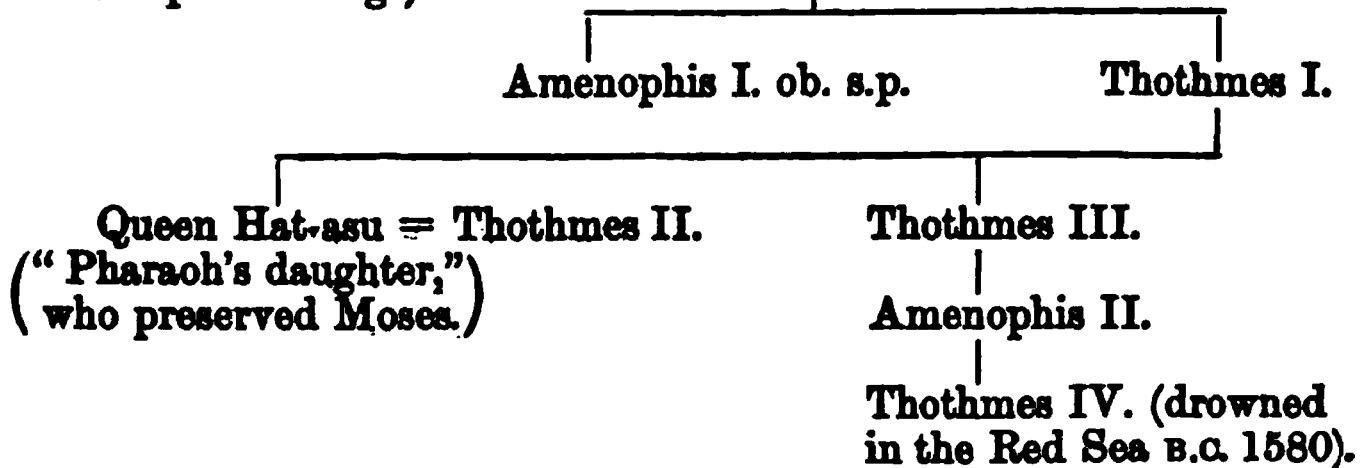
23. Before entering upon the next step in detecting the harmony between the monuments and Scripture, it may not be amiss to insert a brief genealogical sketch of the different Pharaohs during the sojourn of the Israelites in Egypt, as the monuments have yielded more information respecting these kings than all the other Pharaohs, with the exception of Ramessu the Great, put together.

SHEPHERD DYNASTY.

MANETHO'S XVIII. DYNASTY.

Pharaoh Apophis (Joseph's Patron).

Pharaoh Assa (Last of the Shepherd Kings). 1706 B.C. Amosis (Conqueror of the Shepherds).



24. With reference to what is stated in Scripture respecting the preservation of Moses, it may be safely assumed from

Exodus i. 10, *Acts* vii. 22, and *Hebrews* xi. 24, that he was reared as the adopted son of "Pharaoh's daughter," who must have been a Queen Regnant in her own right, as none but such could have compelled so jealous a priesthood to train her adopted child "in all the wisdom of the Egyptians." Now it can be satisfactorily shown from the monuments, that in the whole line of Pharaohs there was only one Queen Regnant, whose name appears as such during that long period of time. Her name is read on the monuments in full as *Hat-asu Numpt-amun*, and she appears exactly in the place we should have expected to find her from the account in *Exodus*, being, as is seen in the above pedigree, the granddaughter of the "king which knew not Joseph." She reigned many years in Egypt, first in the name of her father, then conjointly with her husband, and subsequently in the name of her younger brother Thothmes III., who latterly sought to erase every sign of his sister's rule, either through revenge at her having offered the succession to Moses, or from some other cause unknown.

25. Queen *Hat-asu* is invariably represented on her monuments with a beard to denote that she was a sovereign in her own right, like our own Queen Victoria. She erected two obelisks at Thebes in memory of her father, one of which is still standing, and the fragments of the other are scattered all around. The standing one, the second largest and certainly the most beautiful obelisk in the world, is formed of a single block of red granite, highly polished, with reliefs and hieroglyphs of matchless beauty. The inscription on the plinth states that it was commenced in the 15th year of Queen *Hat-asu's* reign, and completed in the seventeenth. On each side of the obelisk it is stated that she reigned "in the name of her father;" and amongst other titles which she bears,—such as "royal wife," "Queen of Upper and Lower Egypt,"—is found the significant and well-known name of "PHARAOH'S DAUGHTER."

26. The temple of *Dier-el-Bahari*, at Thebes, is another monument due to the magnificence of Queen *Hat-asu*, on the walls of which are sculptured with great skill the details of a campaign against the Ethiopians. They represent the Egyptian general receiving the enemy's commander-in-chief, who presents himself as a suppliant before him, accompanied by his wife and daughter. And it is just possible that the representation of *Hat-asu's* general may refer to her adopted child Moses; for Scripture shows that he was "mighty in words and deeds," before he "refused to be called the son of Pharaoh's daughter." And Josephus (*Antiq.*, II. x. § 2) and

Irenæus (*Frag. de Perdit. Iren. Tract.*, p. 347) alike relate the fame which Moses gained as general of the Egyptian army in a war with Ethiopia, which, though encumbered with a good deal of romance, still serves to explain the statement in *Numbers* xii. 1, that Moses married a woman of that country.

27. Perhaps the most positive proof from the monuments of the existence of the Israelites in Egypt at this period of history, is seen in the well-known picture of the brickmakers at the village of Gournou, near Thebes, there still exists the remains of a magnificent tomb belonging to an Egyptian noble named *Ros-she-ra*. He appears to have been overseer of all the public buildings in Egypt during the reign of Thothmes III. The paintings on this tomb, which are given with great effect in Lepsius, *Denkmäler* (Abth. iii., Bl. 40), afford clear proof not only of the Israelites being in Egypt at the very time that Moses was compelled to flee to Midian, but of their being forcibly engaged in the occupation of brickmaking. There are several inscriptions on this remarkable monument, portions of which read as follow :—

The centre inscription—

“Captives brought by his Majesty Thothmes III.
To carry on the works at the Temple of Ammon.”

On the left—

“Moulding bricks for making a treasure city in Thebes.”

On the right—

“The chief task-master says to the builders : ‘Work
Actively with the hands. Be not idle. Let there be no giving in.’”

28. Some of these captives employed in making bricks bear the unmistakable features of the Hebrew race; and among them four Egyptian task-masters are represented as described in the Book of Exodus, so as to leave no reason for doubt but that the picture represents a striking commentary on the oppression of the children of Israel. Sir Gardner Wilkinson remarks “that more bricks bearing the name of Thothmes III. have been discovered than of any other period.” And Rosellini adds that “the bricks which are now found in Egypt, belonging to this reign, *always have straw mingled with them*, although in some of those that are most carefully made it is found in very small quantities.”

29. The world was startled a few years ago by M. Chabas’s discovery in the Leyden papyrus of a set of captives who are

described as being employed in drawing stone for the Temple of the Sun, built by Ramessu the Great, which he reads as belonging to the tribe of the *Aperi-u*, identifying them with the "Hebrews," and confidently challenging disproof of this theory. But independently of the fact that the same tribe are spoken of as possessing a Lower and an Upper Kingdom when the bondage of the Israelites was at its height in the reign of Thothmes III., and also as "captives" during the time of Ramessu IV., i.e. centuries *after* the exode, making it thereby impossible to identify them with the Jewish race, we are compelled to reject M. Chabas's theory on philological grounds likewise: e.g., the exact mode of rendering the word "Hebrews" in Roman characters would be *Haberim*; the hieroglyphic characters read literally *Apu-ri-aa-a*, by which it will be at once seen that these letters do not approximate sufficiently near to the Hebrew word *Haberim* to warrant our identification of them as the same people.

30. A variety of incidents combine to show that the grandson of Thothmes III., and bearing the same name, was the individual Pharaoh who appears from Scripture to have been overthrown in the Red Sea, notwithstanding that Sir Gardner Wilkinson, who regards Thothmes III., as the Pharaoh of the exode, contends "there is no authority in the writings of Moses for supposing that Pharaoh was drowned in the Red Sea." (*Ancient Egyptians*, i. 54.) It is certain from the monuments that his reign was a short one, which agrees with what Scripture records of this infatuated king. A tablet between the paws of the Great Sphinx at Ghizeh is one of the few monuments remaining of this Pharaoh. Another inscription discovered on a granite rock opposite the island of Philæ, on the Nile, has this singular circumstance connected with it. After the usual boasting titles, it stops suddenly short with the disjunctive particle "*then*,"—evidently pointing to defeat and disaster, which were the characteristics of this Pharaoh's reign. And the inference that he was the Pharaoh lost in the Red Sea appears to be confirmed by the fact that after all the careful researches of modern explorers, *no trace has been found of this king's tomb* in the royal burial-place near Thebes, where the sovereigns of the 18th Dynasty lie; though that of his successor, Amenophis III. has been discovered in a valley adjoining the cemetery of the other kings. (Wilkinson's *Thebes*, pp. 122, 3.)

31. It is not quite clear that Amenophis III. immediately succeeded his reputed father Thothmes IV., though he is so represented in the two tablets of Abydos, which if true would serve to confirm the opinion of the latter being the Pharaoh

of the exode. Wilkinson says that "though Amenophis III. calls himself the son of Thothmes IV., there is reason to believe that he was not of pure Egyptian race. His features differ very much from those of other Pharaohs, and the respect paid to him by some of the 'stranger kings' seems to confirm this, and to argue that he was partly of the same race as those kings who afterwards usurped the throne and made their name and rule so odious to the Egyptians" (Rawlinson's *Herod.*, Appendix, II. viii. § 2). If this surmise be correct, and several other incidents, such as the change in the national religion which commenced in the reign of Amenophis III., seem to confirm it, it is noteworthy to see how far it agrees with the statement in Exodus, that the eldest son of the Pharaoh of the exode did not succeed his father on the throne, as it is written: "At midnight the Lord smote all the first-born in the land of Egypt, *from the first-born of Pharaoh that sat on his throne*, unto the first-born of the captive that was in the dungeon."

32. Such is a brief sketch of the history of Israel in Egypt as confirmed by the monuments of that country. Dr. Thompson has well observed that "the illustration and confirmation which the Egyptian monuments bring to the sacred narrative is capable of much ampler treatment than it has yet received. Every incident in the pastoral and agricultural life of the Israelites in Egypt, and in the exactions of their servitude, every art employed in the fabrication of the Tabernacle in the Wilderness, every allusion to Egyptian rites, customs, and laws find some counterpart or illustration in the picture history of Egypt; and whenever the Theban cemetery shall be fully explored, we shall have a commentary of unrivalled interest and value upon the Books of Exodus and Leviticus, as well as the later historical books of the Hebrew Scriptures." (Smith's *Dictionary of the Bible*, art. *Thebes*.)

The CHAIRMAN.—I have now to move that the thanks of this meeting be given to the author of this paper, who, I am sorry to say, is absent this evening on account of illness. Had he been present, I should have asked him many questions, but I hope we have some one else here who is acquainted with Egyptology, because we want much more information on the subject than is contained in this paper. I shall now be glad to hear any observations which those present may have to offer on the subject before us, and may I express a hope that some reference will be made to the newly-discovered stone of which we have all heard.

Rev. J. H. TITCOMB.—While fully acknowledging the research and industry manifested in the compilation of Mr. Savile's paper, I feel bound to say, that I regard it as the work of an enthusiast to one idea rather than that

of a patient and large-minded investigator into a sphere which is almost boundless in its capacity for illustration. If I understand Mr. Savile's argument rightly, it stands or falls with the chronological synchronism of Moses and Tuthmosis, or, as Mr. Savile calls him, Thothmes III., and of Joseph and Pharaoh Apophis. Assuming, of course, that that synchronism is correct, I am ready to grant that Mr. Savile brings several points which fairly illustrate his position ; but the question is, has Mr. Savile fair grounds for being so confident as he is upon this particular point ? I think he speaks with too much confidence when he says, in his 12th section,—

“The assertion of Joseph being Viceroy of Egypt under Pharaoh Apophis is as much an historical fact as that Sejanus was prime minister to Tiberius in ancient, or William Pitt to George III. in modern times.”

And in another sentence, in his 21st section, he is still more confident, for he says :—

“I believe it to be as certain an historical fact that the ‘king which knew not Joseph’ was Amosis, the head of the 18th dynasty, and conqueror of the Shepherds, as that our William I. was the hero of the Norman conquest.”

Now, it will be my object to show that that theory is not correct, and first by pointing out what I consider to be some of the weak points of the paper. In the 13th section Mr. Savile tries to show that Joseph told his brethren to tell Pharaoh that they were shepherds, as a recommendation to Pharaoh, because Pharaoh himself was one of the shepherd kings. That is Mr. Savile's argument ; but it might be equally well put just the opposite way. Assuming that Pharaoh was not a shepherd king, and that ordinarily shepherds were held in abomination in Egypt,* then Joseph might have told his brethren to declare that they were shepherds, in order to be kept as far away as possible, in the land of Goshen, out of the reach of danger and insult. That, I maintain, is quite as natural a supposition as the other. (Hear, hear.) Then, in his 16th section, Mr. Savile maintains that the city Avaris was “the city of the Hebrews,” and that that is its real meaning ; but I venture to criticise that point. Assuming it to be the case that Avaris was “the city of the Hebrews,” and was known by that title, and had its origin because it was given to the Hebrews when they settled there in the time of Apophis, I can show by a quotation from Manetho that the whole of that theory may be entirely upset. Manetho says :—

“Salatis found a city lying to the east of the Bubasrite arm of the Nile, called Avaris, which he repaired and fortified with strong walls. . . . He

* See Canon Cook *On the Bearings of Egyptian History upon the Pentateuch*, Speaker's Commentary, vol. i. p. 443, *et seq.* Bishop Harold Browne says the monuments of the Egyptians indicate their contempt for shepherds and goatherds, by the mean appearance always given to them.—ED.

died after a reign of 19 years, and was succeeded by another king, Beon, who reigned 44 years. After him, Apachuas reigned 36 years. Then Apophis."

So that the city was actually known by the name of Avaris 99 years before the time of Apophis; and if that be correct, it altogether breaks down the argument of Mr. Savile that it was named Avaris because possessed by the Hebrews in the time of Apophis. Then in the 18th section of the paper, while I quite agree with Mr. Savile in maintaining that the famine chronicled as having taken place in the reign of Sesertesen I. was not the famine spoken of by Moses in Genesis, I cannot but call attention to Mr. Savile's strange mistake in arguing from Scripture that the famine was not in Egypt. So far from the statement being correct that Moses declared that there was famine in all lands but Egypt, the very opposite is the case. In the 41st chapter of Genesis, verses 30 and 31, we are told:—

"And there shall arise after them seven years of famine; and all the plenty shall be forgotten in the land of Egypt; and the famine shall consume the land; and the plenty shall not be known in the land by reason of that famine following; for it shall be very grievous."

It is true that there was plenty of corn in Egypt, but it does not at all follow that there were plenty of crops, and that harvesting was going on. The famine was in Egypt just as much as anywhere else, but that does not bear on the main argument; it is simply an error of reasoning on the part of Mr. Savile. Then, in the 27th section of the paper, there is another weak point connected with the interesting picture of brickmaking referred to by Mr. Savile. His argument is, that one of the most positive proofs of the existence of Israel in Egypt in the reign of Thothmes III. is that *some* of the captives in that picture bear the unmistakable features of the Hebrew race. But there are two replies to that argument. The first is, that if the picture had been one of the Hebrews working in bondage, I apprehend that *all* the captives would have borne that ethnological portrait; and the second is, that the captives so represented might as well have been intended for Chaldeans as for Hebrews. Having shown these weak points in Mr. Savile's paper, I will now endeavour to raise some independent arguments of my own against the view propounded in it, that Joseph fell in with the shepherd kings. If he did, he must have fallen in with the Semitic race; but I think that all the Scripture testimony that we have goes to show that the Pharaoh with whom Joseph had to do was not of the Semitic, but of the pure Egyptian or Hamitic race. In the first place, all the names mentioned in the narrative are pure Egyptian, and not Semitic. Potiphar, or Petphra, is not a Semitic but a pure Egyptian name, bearing no analogy to the names that most probably would have existed about the court during the time of the shepherd kings. Then, in the 41st chapter of Genesis, verse 45, there is this strong argument:—

"And Pharaoh called Joseph's name Zephnath-paaneah; and he gave him to wife Asenath, the daughter of Poti-pherah, priest of On."

Here is an assemblage, not of Semitic, but of pure Egyptian names ; and, to my mind, if Pharaoh had been a shepherd king, hating the native Egyptians as we know the shepherd kings did, it would have been inconceivable that he should have given Joseph, as a mark of special honour, an Egyptian rather than a Semitic name, and still less is it conceivable that the worship of the Egyptians in the temple of On (which is the ancient Heliopolis)—being a purely Egyptian form of worship—should have been carried on by the shepherd kings, who overthrew all the idols of Egypt and established a different form of worship in their place. Again, this theory is to my mind incompatible with the genealogy of the Scriptures. By Mr. Savile's calculation, the Pharaoh drowned in the Red Sea was Thothmes IV., whom he supposes to have died 1580 years before Christ. How he gets the date I do not quite know, for Archbishop Usher's chronology makes it 1491 B.C. ; but, be that as it may, if Mr. Savile is right, the interval between the Exodus and Solomon's prime of life was exactly 580 years. I may be asked, How do I get this ? Because it is an undisputed fact that there is an historical date to be assigned to the time of Solomon, and that date is B.C. 1000. Nobody questions this, however much we may differ as students of Egyptology or of Scripture up to that time. Every student of chronology, from a comparison with Greek and other profane histories, accepts the fact as established and true, that Solomon was on the throne 1000 B.C. If, then, the Exodus took place in the reign of Thothmes IV., 1580 B.C., there was an interval of 580 years between the Exodus and the time when Solomon was on the throne. Now turn to the fourth chapter of the book of Ruth, and at the end of it you will find the generations of Pharez. In the 20th verse you have the birth of Nahshon, and the genealogy is continued thence down to David. Nahshon was a prince of the tribe of Judah at the time of the Exodus, as the book of Numbers tells us ; but from Nahshon there are only six generations down to Solomon. Nahshon begat Salmon, Salmon begat Boaz, Boaz begat Obed, Obed begat Jesse, Jesse begat David, and David begat Solomon, making six generations in all, to cover a period of 580 years. That gives an average of 96 years for each generation, and I ask whether this is not evidently unhistorical, and whether a theory which demands such a belief can be accepted in a critical age such as this is ? Is it probable that men lived 96 years each for six generations in order to hand down the stream of life ?

The CHAIRMAN.—I understand you to mean that if Mr. Savile's theory be correct, each must have had his eldest son at 96 years of age ?

Mr. TITCOMB.—Yes. I think it is incompatible with fact, and the whole argument, therefore, in my opinion, falls to the ground. Now, before I close, allow me to advance my own view in the shape of a counter synchronism between Israel in Egypt and the Egyptian kings. I will not speak confidently about my view, but I will bring a few arguments to show that it is at least probable. One whom I see present (the Rev. D. I. Heath) may possibly dispute my position, as I am now disputing Mr. Savile's, but that only forms one of the interesting intellectual exercises to be met with in

a philosophical institution. My view is that of Lepsius—that Ramesses II. was the Pharaoh whose daughter reared Moses and who began the persecution of the Israelites, and that Manepthah, the son of Ramesses II., was the Pharaoh of the Exodus. Now on what grounds do I hold this view? First, on chronological evidence, and then on the evidence of the Egyptian monuments. First, as to chronological evidence, I have drawn up and have here a list of the Egyptian kings. It is the result of a close and painstaking collation of the records of the Egyptian dynasties as given by Manetho and as explored by Lepsius and other students of Egyptology. Bunsen has most carefully and methodically compared the works of Erastothanes and Manetho, and Julius Africanus with Lepsius, and has come to the conclusion, that this Manepthah lived 1313 years before Christ. I know that that date differs from the chronology of the Bible, but that chronology is only a deduction made by a modern writer, Archbishop Usher; and then again we have other Biblical chronologies, such as the chronology of Hale, &c.; and we have, therefore, a perfect right to dispute the dates given, on the margins of our Bible, as they are entirely a matter of human investigation. I may therefore say, at once, that I do not think 1491 B.C. is the right date to affix to the Exodus; and I have two reasons for saying so. In the fourth century there was a system of chronology discovered or rather laid down by a certain Rabbi, which has since gone by the name of Rabbinical chronology. It was compiled by comparing the most ancient Hebrew texts extant, and it is a very remarkable fact that the date B.C. which that Rabbinical chronology assigns to the Exodus is the very year 1313, which, from the monuments submitted to the critical faculty of Bunsen, centuries after, has been pronounced to be the time of Manepthah. You may say this is a coincidence, and that you prefer the chronology of Usher, but now I come back to that chronology of Ruth as my second reason, and as a Scriptural reason for my view. The four generations from Pharez to Hezron and to Nahshon will not cover the interval between Jacob's descent into Egypt and the Exodus of Moses, and I therefore come to this, which I must ask you to take for granted. It is generally allowed that the sojourn in Egypt covered 215 years. Mr. Birks, in his book on the Exodus, speaks with confidence, as of a thing almost settled, that 215 years is the right number to allow for it, being the half of the 430 mentioned in the New Testament, and Josephus says:—"They left Egypt 215 years after Jacob came into it." Now, taking the chronology of Ruth, you have four generations to cover this period, which gives an average of 53 years to each generation; that is quite credible—although perhaps it is not what we might have anticipated—it is not unhistorical, and it is quite conceivable. Assuming that,—then, what is the result you obtain? Between the Exodus and Solomon there are six generations; which, multiplied by 53, brings you to the date 318, and then add the date of Solomon, 1000, and you get the date 1318 by a purely Biblical criticism; which date is so very near 1313 that the two may be practically taken as synchronous. This is my argument for supposing that Manepthah represents the Pharaoh of the Exodus rather than Thothmes IV. And now

I have only one more branch of argument, which is drawn from the evidence of Egyptology itself. What took place in the reign of Manepthah, or of Amenophis, as Manetho calls him? A very singular event—the expulsion of the lepers. Manetho says :—

“Amenophis, having a great desire to behold the gods, was told that he could not do so until he ridded the country of lepers, who were an abomination. On this account he ordered 80,000 to the stone quarries, there to work in hard labour. After the poor wretches had suffered, he gave them up the city of Avaris. There they chose a leader,—a priest Osarsiph, who ordered that they should worship none of the Egyptian gods, and they commenced a revolt against Egypt. Against these rebels Amenophis went out to fight, but he fled from them for fear of the gods.”

And Manetho adds :—

“It is said that Osarsiph, who, upon joining them, drew up a constitution and a code of laws for them, changed his name and was called Moses.”

This is the record of Manetho, who lived centuries before Christ, and fragments of whose arguments are preserved by Josephus. Now this was a singular circumstance, and, as falling in with that period, it is a fair argument for supposing that it represents the “driving out” of Israel, from the Egyptian point of view, or as we call it, the glorious exodus of the Israelites. Again, the king who pursued them is represented as flying from them, which falls in with the fact that he was not able to conquer them. Now let us go back to Rameses II., or the Great. In the second chapter of Exodus we are told :—

“And it came to pass in process of time that the king of Egypt died, and the children of Israel sighed by reason of the bondage” ;—

and then comes the exodus. Egyptology itself shows that the predecessor of Manepthah began the persecution of the Israelites, and the Bible shows that it was in his reign that the city Raamses was built. We may expect to find that that city was built by the Jews, and we do find it ; and the name of the city falls in exactly with the name of the king under whom they lived. Then Tuthmosis IV. would be the Pharaoh living when Joseph and his brethren came into Egypt with their father. In the nature of things there would be new religious influences introduced by the splendour of the achievements of Joseph’s wisdom. The king honoured the God of Joseph, and felt that the God of the Hebrews was a great God. Have we nothing to show that in that reign there was the importation of a new religion? We have just the very thing that is wanted. We learn that under the successor of Rameses, Amenophis III., a new worship was introduced, called the worship of the sun’s disc, or the worship of Aten. Dr. Birch is my authority for this ; and it falls in with the state of things you might expect, that after the Pharaoh in whose reign Joseph had become so illustrious had died, there would be a great accession of influence in the cause of the true religion of Joseph, which must be expected to tell upon society and to be made visible. The word “Aten” must be read “Adn,” which it seems amounted to just

the same as Adonai, Lord,—one of the Hebrew words for God. The truth is that the Egyptian monuments do confirm the sojourn of the Israelites in Egypt, but I think Mr. Savile is in error in being so confident of particular synchronisms. The monuments of Egypt are full of illustrations which would give everything we want without any attempt at synchronism at all. I have attempted synchronisms because Mr. Savile has done so ; but I do not think that it is the right way of dealing with this question. The proper method would be to give these points as illustrations of the harmony of other evidence with the Old Testament, and there to leave it. (Cheers.)

REV. C. GRAHAM.—I think we have reason to feel greatly obliged to Mr. Savile for introducing this subject to us. It is profoundly interesting, and one which must throw a great deal of light upon Holy Scripture, as the observations of Mr. Titcomb have sufficiently proved. Mr. Titcomb began his remarks on the destructive, and then entered upon the constructive principle, and for a few moments I will endeavour to follow him in the first of these two branches. I do not at all agree with Mr. Savile's criticisms. In the 13th section, he says :—

“Before endeavouring to show how this is the case, it may be right to notice an objection which is frequently brought against this opinion. As we read in the 46th chapter of Genesis, that in the time of Joseph ‘every shepherd’ was considered ‘an abomination unto the Egyptians,’ it has been naturally argued that a native Pharaoh would not have promoted Joseph, who was of a shepherd race, to be second ruler in his kingdom, and therefore that Joseph could not have been viceroy during the rule of the shepherds in Egypt. But it is doubtful whether our English version conveys the exact sense of the original ; as it is clear that Joseph, before introducing his brethren to Pharaoh, prompted them to avow that they were in reality *shepherds*, ‘from our youth even until now, both we and our fathers,’ in order that Pharaoh might give them ‘the best of the land (*viz. Goshen*) to dwell in ;’ which the king at once consented to do. Now all this can only be explained upon the principle that the Shepherd dynasty at that time was reigning in Egypt.”

A little further down Mr. Savile gives us the Hebrew word, which he renders “idol” or “consecrated object of worship”—*toyabah*. But that word radically and primarily means just what our translators have rendered it—an “abomination.” Its tropical meaning no doubt is an idol, and it is often used tropically for an idol, but its primary meaning is just what we have in our version. Gesenius gives us that same word from the 43rd chapter as an example of the rendering “abomination.” Now, if we alter the translation in the 46th chapter, we are obliged to alter it in the 43rd also, where the Egyptians would not consent to eat at the same table with Joseph's brethren, because to eat bread with the Hebrews was an abomination to the Egyptians. Gesenius introduces both passages ; in both the word is the same, but in the second it is inconstruct, and the Septuagint renders it “abomination” in both places. I have taken the trouble to consult some of our best commentators and translators on the subject, and they are all agreed that the simple meaning of the word, in these instances, is “abomination.” Then Mr. Savile

makes another alteration. He takes the words *roch tson*, used for shepherd, and offers a criticism which I do not find in any other critic, taking Dr. Tregelles along with the rest ; and therefore I think it must be clearly and distinctly rejected, and all that is built upon it must fall to the ground. But there is another point which, while upon this destructive principle, I must refer to. Mr. Savile says in his 26th section :—

“ It is just possible that the representation of *Hat-asu's* general may refer to her adopted child Moses ; for Scripture shows that he was ‘ mighty in words and deeds,’ before he ‘ refused to be called the son of Pharaoh’s daughter.’ And Josephus and Irenæus alike relate the fame which Moses gained as general of the Egyptian army in a war with Ethiopia, which, though encumbered with a good deal of romance, still serves to explain the statement in Numbers xii. 1, that Moses married a woman of that country.”

As to the triumphs of Moses in Africa, as a general of the Egyptian army, we may accept Mr. Savile’s view that there is no evidence to sustain them ; but what about Moses having married a woman of that country ? We have only the account of one marriage of Moses. When he forsook Egypt, fearing the wrath of Pharaoh, he went to the land of Midian, where he was received by Jethro the priest, whose daughter, Zipporah, he married, and by her he had two sons. After he had brought Israel through the Red Sea and the wilderness, Jethro, or Reuel—for he has both names in the Pentateuch—brought Zipporah and her two sons to Mount Sinai to Moses. Zipporah had before accompanied Moses, but she was sent back after what had transpired at the inn ; but as soon as Moses triumphed, Jethro brought Zipporah and her two sons to him. Now who was Zipporah ? She was a Cushite, for I need not say that that Hebrew word which is always rendered Ethiopian is Cushite. Now what was that ? Go back to the 2nd chapter of Genesis and you will see that one of the four rivers that branched from the Garden of Eden compassed the whole land of Ethiopia, or of Cush. It is assuredly not Ethiopia in Africa, but Ethiopia in Asia. Now Zipporah dwelt in the land of Cush, who was the son of Ham, and who peopled that part of Asia. Cush in the first instance is applied to Arabia and to that land of Midian which seems to have been in the peninsula of Sinai. Zipporah is called a Cushite, and would naturally be so called by Aaron and Miriam in their factious dispute with Moses. Probably they were jealous of Zipporah’s influence, and that dispute very likely arose when Jethro returned to his own home. In this I consider there is no argument whatever to sustain the teaching of Mr. Savile’s 26th section.

The CHAIRMAN.—I think it is universally admitted that that passage from Josephus alluding to the marriage of the queen’s daughter is a simple fiction. It has all the appearance of fiction.

Mr. GRAHAM.—Well, I take what is indisputable,—Scripture history and the geography we gather from it,—and I submit that there is no ground whatever for Mr. Savile’s argument. And now let me add a little that is constructive, or more properly perhaps, auxiliary, to the subject of this paper. I think that in the book of Genesis we find much that coincides

with statements in profane history in relation to Israel in Egypt, and to Israel and Egypt. There is no question, according to the statements of historians, that at the period when Abram went down into Egypt, that country was in a high state of civilization ; and that coincides with the statement in Genesis that Abram was hospitably received by Pharaoh and entertained by him, and that he received from him large presents, and among them were sheep and asses and camels and slaves. Mr. Savile has dealt very properly here with the asses and sheep, but another objection has been raised to the presentation to Abram by Pharaoh of camels, on the ground that at that time the camel was not known in Egypt. Now apart from the fact that Egypt was surrounded by deserts, and that the camel is exceedingly useful for desert travelling, and has obtained the name of "the ship of the desert," so that it is not at all probable that the Egyptians would know nothing of camels, it is a fact that the head and neck of the camel have been traced on the monuments of Egypt in many instances. Then as to the fact of Abram receiving slaves from Pharaoh. We know that slavery was a state of the most cruel bondage in almost every case where it existed during the early period, but it was not a state of the most cruel bondage in Egypt. We find, according to the statement of Diodorus in a quotation given from that author in Dr. Kitto's fragments of Egyptian laws, that it was punishable by death for any man to put to death his slave. Compare that with the simple fact that when Joseph falls under the displeasure of Potiphar, he is not at once put to death, but is sent to prison ; and that even the king himself, when he suspects two of his servants, the chief butler and the chief baker, does not deal with them in a summary way and order them to execution, but sends them to prison ; and it seems that there was some sort of trial before even the king could put them to death, and that that investigation led to the release of Joseph. Here is a striking coincidence between the statements of Diodorus and the facts recorded in Genesis. Now we come to Joseph as viceroy, and we are told that the priests did not sell their land to him when the people did. They had no necessity to sell their land, because they had a portion allowed them by the king of Egypt. Now take up Herodotus, and you will find that the priests were entirely saved from all domestic cares and concerns, and they had not merely the consecrated bread but a daily allowance from the king and an abundance of geese. There is distinct harmony between Herodotus and Genesis. Then take the fact of the idolatry instituted by the Israelites after their delivery from Egypt. They set up a calf or steer, which is what the Hebrew word means, at Sinai, and they worshipped it. That was evidently an imitation of Apis, the Ox-god of the Egyptians. Look at the feast which follows the worship. There is eating and drinking and dancing, and, what has often perplexed commentators, the people were stripped naked. In the Egyptian festivals the people cast away their garments, and in this case there is the distinct fact mentioned that the people were naked, and Moses deals with them as having cast away their clothes. It does not mean that they were literally naked, but, according to the Egyp-

tian custom, they cast away their outer garments. Further on we are told that Jeroboam came from Egypt, and in order to prevent the ten tribes from going up to Jerusalem to worship, he set up two calves,—one in Dan in the north, and one in Bethel in the south-east of the kingdom : and there is another simple fact quite in accordance with the facts of the Scriptures : in the book of Amos we have the passage quoted by Stephen ; they took up the tabernacle of Moloch, the “star of their god Remphon,” the images which they made to worship. In Amos we have Chiun mentioned as one of these images, and according to the monumental records we have these gods worshipped in Egypt,—the very worship that was practised in the wilderness by Israel. They had idols something like the Roman Lares and Penates, or like the shrines made by Demetrius and the craftsmen with him, for Diana ; and these are matters that strictly corroborate the statements of Sacred Scripture. There is another fact noticed by Herodotus, that Egypt had a standing army, and that I believe is corroborated by the Greek historians generally. Herodotus enters into details, and tells us that every soldier had twelve acres of land, and that 2,000 of them formed the guard of Pharaoh. Now compare that with the Biblical narrative. As soon as Pharaoh finds that the Israelites do not cross the isthmus and go directly to Canaan, but go down the western shore of the Red Sea, he at once musters a large force of infantry and cavalry, and 600 chosen chariots, and pursues them. There we have a fact that strongly corroborates the statements of the Divine penman, and I believe we shall also find in the Greek historians this fact, that no nation except Egypt had a standing army. But, in truth, we are constantly coming across important facts which add continually to the accumulation of evidence which substantiates and corroborates strongly and decisively the great statements of the Inspired record. (Cheers.)

The CHAIRMAN.—Perhaps Mr. Heath, who has long studied Egyptology, may have some interesting matter to lay before us.

The Rev. DUNBAR I. HEATH.—I have only come to hear the paper and the discussion. It is fifteen years since I brought out a volume on this branch of learning, *Exodus Papyri*, but I am bound to confess that that volume has not yet set the world on fire, and as for myself, my memory has suffered so much that three-fourths of what I did know has now entirely gone from me. I am, however, glad to say that, in my opinion, Mr. Titcomb's chronology is substantially correct, and I will just add one more argument to his, based upon the history of the time. You will remember that when Joshua, forty or fifty years after the Exodus, invades South Palestine, he fights no battle with the great nations we had before heard of, the Suzims, the Anakims, and the Elims,—the great Giants of our translation ; but he fights a nation hardly mentioned before, the Amorites, who must have come forward at a time when these great Shepherd nations had disappeared. And here I may mention, that the Shepherd nations have been spoken of as if they were veritable shepherds. They were really the Suzims, or Shasu in Egyptian, having nothing whatever to do, so far as I can make

out, with our word "shepherd." Joshua came in to fight the Amorites after the Shepherds had disappeared, and by one battle he won the south of Judea. Now, it is allowed on all hands that Ramesses II. was the great conqueror who destroyed these Shasu. We have full documentary evidence of this, and I have reproduced his campaign in this *Exodus Papyri*. Indeed, we know a great deal of his time, and we know from the races which he conquered that the Exodus must have been after his time. We say the Jews dwelt in Egypt, and we talk of Egypt as being a word of very wide significance. If we speak of the land of Ham, we may be right, but if we talk of Mizraim, which in nineteen cases out of twenty we do talk of as the place where the Jews dwelt, that is a very different matter.* In the same way, when we talk of the well-known city of Tyre, we often forget that there were two more cities of Tyre, one in the Persian Gulf and the other in the Mediterranean Sea. I do not profess that the five papyri translated in my book are all as accurately rendered as would be the case if one were doing a bit of Herodotus or Thucydides, but there is a vast amount in my translation which no Egyptian scholar would at all deny. The main difficulty in translating is found in the fragmentary nature of the documents. In these papyri we have a Jannes mentioned five times. He was governor of Heliopolis. We also meet with Balak, the son of Zippor, and none of these names have been met with anywhere but in these *Anastasi papyri*. But a most remarkable coincidence, which tends greatly to strengthen the proof of this chronology, and which is a distinct point of great interest in itself, is that Manepthah II., the monarch of the Exodus, was the son of a man who was the brother of a person whose sarcophagus we have in the British Museum, and who was the governor of Palestine, which belonged then to Egypt. And what do you think his name was? We have all heard of Phineas, the son of Eleazer, the son of Aaron the priest. Phineas is not a Hebrew name, but it is the name of that governor of Palestine whose sarcophagus we have in the British Museum. It is a pure Egyptian name. There are a vast number of other interesting points in this work. These papyri are in many places in a very dilapidated condition, and when you come to one particular and perhaps vitally important word, you may feel very well satisfied if you find that only half has been torn out of the middle. In one place the name of Jannes occurs; and there is another name with it, but several letters are wanting. There is a J and an M, and then a gap; but it is the right length for being Jambres; and when you find those names together in any document, you may assume them to be the names of the magicians mentioned in the Scriptures. The Egyptians had a peculiar style, and were fond of giving people complimentary names, as a "Bull" for instance; and we read in the papyrus "the capital of the Bull Jambres in the land of Dag." Now

* The word Mizraim is analogous to the words Michmash and Minnith; Michmash is Mi-Chemosh, the place of Chemosh; Minnith is Mi-Neith, the place of Neith; and Mizraim is simply Mi-Zuraim, the place of the two Zurs, or two cities named Tyre, in the Delta.

all this is very curious indeed. The fact that there was always a colony of Jews in Mizraim south of Judea in later times is very clear, and there is no reason that I know of for doubting the account of their original advent into Mizraim, which was held for five hundred years by the Shepherds, a Semitic people ; and it is satisfactory to find Jannes and Jambres spoken of together in connection with the Semitic land of Dag. In one of the papyri the name of Moses actually occurs in a sort of narrative kept by an Egyptian ruler about his slave people. But the whole thing is very curious, and deserves the attention of those who are interested in such matters. (Cheers.)*

The CHAIRMAN.—In summing up this discussion, I must express the opinion that an examination and discussion of the question as to what is the genuine Biblical chronology would be very desirable ; one might then come to some agreement as to where the gaps are to be found. That there are gaps in it seems unquestionable. Our existing chronologies are unsatisfactory, and it is very important that we should ascertain the gaps, even if we cannot ascertain the precise chronology. For instance, in the chronology of the Old Testament, it is questionable whether there are not several omissions, such as we know to be the case in the genealogies of Matthew. Indeed, some hold that we are hardly in a position to ascertain for certain the precise period which elapsed during the sojourn of Israel in Egypt. The best way to illustrate the history of Genesis is by bringing forward an amount of illustration from the habits, customs, and daily life of the Egyptians, which are unquestionably to be seen on the Egyptian monuments. Of course the more the monuments of Egypt are thoroughly examined, the more interesting it will be to find the points where they agree with the Bible, prove its credibility, and show that it was written by men well acquainted with Egyptian matters. There are some parts of Mr. Savile's paper the evidence for which I should greatly desire to see. Much of it does not rest upon certain evidence. In looking it over very rapidly, I have observed that the author has quoted as authorities persons who lived, one in the third century, and another in the eighth century of the Christian era. Now authorities of that kind are not the best, and if Mr. Savile has pursued the same course in other parts of the paper where I am unable to follow him, such authorities must not have too much reliance placed upon them. What is the use of my testimony as evidence of what occurred 1,500 years ago ! Traditions, after such an interval of time, are absolutely valueless. We must have better evidence than that for matters which happened at so remote a period. As to the fact of shepherds being an abomination to the Egyptians, it is not necessary to understand that the sacred writer meant that shepherds were an abomination to every race of the Egyptians, because we know that in different parts of Egypt one animal was the subject of supreme reverence, while in other parts the same animal was the subject of

* That all do not concur in Mr. Dunbar Heath's statements is well known.

equal dislike. It is sufficient, then, to know that in one part of Egypt shepherds were disliked. Herodotus mentions that although in one part of Egypt the goat was the subject of adoration, in another part it was the subject of detestation. That is quite sufficient to support the language of the sacred writer ; and to a large number of the Egyptians the sheep and the work of the shepherd might have been held in equal abomination. Mr. Savile sometimes uses stronger expressions than I think the facts justify ; as for instance, when he tells us that it is as certain that the king "who knew not Joseph" was Amosis, as that William I. was the hero of the Norman conquest. Any one who has examined the mode in which dates in Egyptology are arrived at, must be aware that many of them rest on an uncertain basis, and sometimes we get nothing more than a long list of names, and we are uncertain whether some dynasties were or were not contemporaneous. I am quite sure that we must wait for some time before we can be accurate as to the dates of these Egyptian kings, for at present there is a great deal of it founded on supposition,—more, I think, than the evidence often justifies. That, at all events, has been my impression on reading Bunsen. We are safe in reading the monuments of Egypt as affording evidence of the existence of certain kings ; but as to identifying these dates as matters of absolute certainty, although I do not say that we never shall be able to do so, I most positively assert that we have not done so yet. (Cheers.)

The Meeting was then adjourned.

MR. SAVILE'S REPLY.

I have carefully read through the remarks which have been made on my paper, and beg leave to offer the following reply ; mentioning at the same time that a complete answer to the criticisms would demand a larger space than can be spared.

I quite agree with the Chairman's remark that "an examination and discussion of the question as to what is the genuine Biblical chronology would be very desirable," and trust that the Institute will one day take it up.

In reply to his regret that he has not been able to obtain any information respecting "that new stone which we have all heard of," I would commend to his attention a pamphlet *On the Trilingual Inscription at San (Decree of Canopus)* by my friend Dr. Birch, and which is also found in vol. ix., New Series, of the *Transactions of the Royal Society of Literature*, as giving the desired information.

In reply to the Chairman's remark, that I have used "stronger expressions than the facts justify," especially in relation to the king "who knew not Joseph," to which Mr. Titcomb also objects, I would ask leave to correct my previous expression, and would wish the sentence should run thus :—"It appears to me as conclusive, from the evidence which has been adduced, that

the 'king which knew not Joseph' was Amosis, the head of the 18th Dynasty, as that our William I. was the hero of the Norman Conquest"; and if any one wishes to see this subject fully discussed, I would direct attention to the very able Essays of Canon Cook *On the Bearings of Egyptian History upon the Pentateuch*, Speaker's Commentary, vol. i. pp. 443-492. I may mention that Canon Cook did me the honour to ask my opinion on those essays some years before the Commentary was published; and though there are some points on which I was then, and still am, unable to agree with that learned writer, yet I cordially appreciate their immense value in confirming the truth of the Pentateuch. They are an honour to the small body of Egyptian scholars in this country; and they prove, as it appears to me incontestably, that on the disputed point respecting the king who knew not Joseph it could be none other than the famous conqueror of the shepherds, the head of the 18th Dynasty.

In reply to Mr. Titcomb, who objects, as does Mr. Graham, to the probability of Joseph's patron being one of the Shepherd kings, this alone would require many pages to answer adequately. I would confine myself, therefore, to pointing out, partly in reply to an objection made by Mr. Row, as to the little value of authorities who lived "one in the third century and another in the eighth century of the Christian era," that I was compelled to such a course simply through the paucity of authorities at my disposal. And if I adduced the testimony of George Syncellus, a Byzantine monk of the eighth century, that "all are agreed that Joseph governed Egypt under Pharaoh *Apophis*," it was merely to show that at such a period such was the current tradition, which must have been handed down from generation to generation, respecting the true name of Joseph's patron; and that there was no reason to doubt either its genuineness or its historical truth. Moreover, when in our own age, through the discovery of the Rosetta stone, invaluable inscriptions on the monuments of ancient Egypt have been interpreted, and I thereby find the strongest confirmation of the above tradition, I am compelled to accept it in support of the truth of the story of the Exodus; and in proof of this I would direct attention to the papers of Mariette-Bey, in vol. iii. of the *Revue Archéologique*, 1861, who has adduced very important evidence on this subject. Mariette-Bey was for many years Director or Curator of the Boulaque Museum, near Cairo, formed by the Pasha of Egypt for the express purpose of preserving the priceless monuments of that country, and probably he would be accepted by Egyptian scholars as the first living authority on such a subject. It may be interesting to mention that the Louvre now contains a large statue of a Pharaoh, brought by Mariette-Bey from the ruins of San (the Biblical Zoan), which he believes to be a veritable representation of Joseph's patron.

Mr. Titcomb objects to my calling Avaris "the city of the Hebrews," which I have done on the authority of two such distinguished scholars as De Rouge and Ewald, because Manetho says it was founded by Salatis, the first of the Shepherd kings, before the Hebrews came into Egypt. But surely this implies no more than that Manetho, who wrote in the third century

before Christ, speaks of a certain place known by a certain name at the time he was writing ; just as Moses (Gen. xlvii. 11) calls Goshen "the land of Rameses," which Pharaoh had given to Jacob and his sons, though it could not have borne that name until the time when another king arose, who knew not Joseph, and which must have been at least a century later.

Mr. Titcomb considers I have made a "strange mistake" in asserting that the famine in Joseph's time was not in Egypt ; but he has misapprehended my meaning. What I wished to show was this—that the inscription on the tomb of Amenj Amenemha, governor of the nome or district of Sah, in Upper Egypt, respecting the great famine in all other parts of Egypt save his own district during the reign of Sesertesen I., differed so much from the Scripture narrative respecting the seven years' famine that it completely disproved Bunsen's rash assertion of their being a record of the same event ; and I am unable to see wherein lies my "mistake."

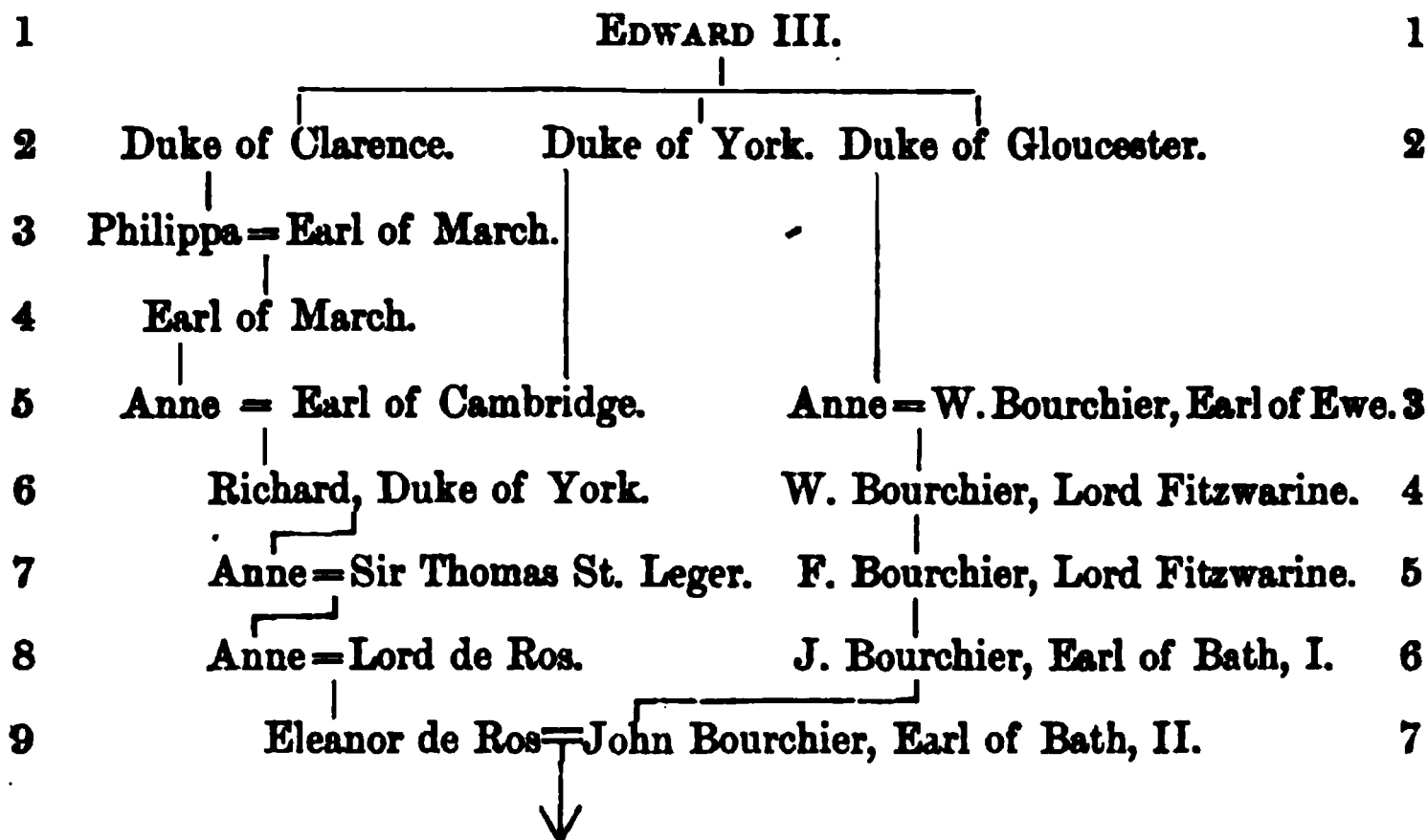
With regard to Mr. Titcomb's objection respecting a "Semitic race" ruling in Egypt during the time of Joseph, I would refer him to Mariette's papers in the *Revue Archéologique*, in which he will find the subject discussed with great learning, and I hope as convincingly to him as to myself.

Mr. Titcomb asks how I get my date for the Exode as B.C. 1580, in opposition to Archbishop Usher, who dates it B.C. 1491. A proper answer to this very natural question would involve the whole subject of Biblical chronology. It will be sufficient if I point out—1st, that the famous passage in 1 Kings vi. 1, "in the four hundred and eightieth year after the Children of Israel were come out of the land of Egypt," is probably an interpolation ; 2nd, that it may be proved by secular records, independent of both Scripture and Egyptian chronology, that Solomon built the Temple B.C. 1014, and that the Exodus of the Israelites had taken place 566 years previously,* which brings the date of that event to B.C. 1580 ; and 3rd, that this synchronizes with the chronology of Manetho's dynasties of the kings of Egypt, and also with other "fixed dates," determined by M. Biot and others.

With regard to the remarks of both the Chairman and Mr. Titcomb respecting the "generations" mentioned in the Old Testament, much must depend upon the context and the sense in which each passage where the word occurs is to be understood ; *e.g.*, in the disputed passage of Gen. xv. 16, "in the fourth generation," some of the best interpreters (*e.g.*, Cornelius à Lapide, Calvin, Gesenius, Ewald, &c.) have held that the Hebrew word *dor* means *seculum*, "age," or a hundred years ; and that the words refer to the four hundred years mentioned previously in ver. 13, and which is the sense required by the context. Or if the word "generation" is to be understood of the period between father and son, we may lawfully suppose, as Mr. Row

* It is important to note that this agrees with the computation of both the Old and the New Testament alike.

remarked, that there may be "several omissions, such as we know to be the case in the genealogies of Matthew"; and as we know is frequently done in our Peerages, which record the pedigrees of our nobility, who can trace as far back as the Norman Conquest. Or on the supposition that every generation is actually specified in Scripture, it would not be difficult to show that in two different lines, tracing from a common ancestor, the same period may embrace *two* generations in the one instance, and *double that number* in the other. I will mention a case with which I am well acquainted in proof of this :—



Now it will be seen that of these two lines, proceeding from the same stock and coming together again in the ninth generation, there are eight generations in one line, while there are only six in the other ; i.e., the third generation in the one was contemporaneous with the fifth of the other ; which might have occurred at a similar ratio in the succeeding generations, and would have proved still more clearly the impossibility of drawing any argument from the number of generations recorded in a single genealogy.

I have only further to point out the historical error which Mr. Titcomb has fallen into by asserting—

"That under the *successor* of Ramesses, Amenophis III., a new worship was introduced, called the worship of the sun's disc, or the worship of Aten. Dr. Birch is my authority for this, and it falls in with the state of things you might expect," &c.

That the worship of the sun's disc began in the reign of Amenophis III. is certainly true, and we know that it lasted for a period of something under a century, as it was put an end to by Seti I., the father of the Pharaoh who is commonly known as "Ramesses the Great." I had drawn an argument from this, to which I still adhere, that the introduction of the worship of the sun's disc was probably caused by the inability of the Egyptian priests to withstand the power of Jehovah, as manifested by the hands of Moses and Aaron, at the time of the Exode, when the *predecessor* of Amenophis III. was on the

throne. But to speak of Amenophis III. as "the *successor* of Ramesses" is as great a mistake as it would be if an historian were to assume that William III., the hero of our Revolution, and not William IV., was the successor of George IV., and to draw his conclusions therefrom. If Mr. Titcomb will again refer to Dr. Birch, I think he will be convinced that such is the case,* though, in respect to this point, it is easy to misunderstand Josephus, who, in his quotation of Manetho, couples *Amenophis* and "his son Rhampses" together in a very singular manner. (See Josephus, *Contr. Apion*, i. § 27.) It is not very clear who these Pharaohs are that are thus named, but it is certain that directly after Josephus gives this quotation from Manetho he adds—"These and the like accounts are written by Manetho. *But I will show that he trifles and tells arrant lies.*" I would call the attention of Mr. Titcomb to this, and at the same time remark on the impossibility of understanding the few fragments of Manetho's history which have been handed down to us by Josephus, save by comparing them with the monuments, which are so great in number at that period of Egyptian history, the inscriptions of which have been rendered so accessible to the student by the unwearied labours of Egyptian scholars in our own age.

With reference to Mr. Graham's objection to my reading of Genesis xli. 34, I admit that it may be fairly disputed. Dr. Birch called my attention to the fact of some Hebraists rendering the word translated "abomination" in A.V., in the way I have done, and which, in its root, according to Gesenius and other lexicographers, has the double meaning of "to desire" as well as "to abominate" or "abhor"; and I still think that the first meaning is the true one of the word as used in the passage in dispute. But it is rather to the previous verses to which I would ask attention; and, in as much as it is clear from the context that Joseph sought the favour of Pharaoh on behalf of his brethren because they were "shepherds," it appears a strong argument in support of the belief that the patron of Joseph was a Shepherd king. Moreover, when we know that the ancient tradition named *Apophis* the last, or the last but one, of the Shepherd kings as Joseph's patron, and coupling it with all that the monuments have brought to light relating to this Pharaoh, the accumulated proofs that such was the case seem to assume the form of a mathematical demonstration. If Mr. Graham will remember that Herodotus, as Mr. Row justly reminded the meeting, mentions that, although in one part of Egypt the goat was the subject of adoration, and in another part was the subject of detestation, it may help to modify his objection to my interpretation of the passage in dispute.

I have had occasion to modify my own opinion respecting Moses's "Ethiopian" wife alluded to in Numbers xii. 1, since my paper was written, on which Mr. Graham very properly raises the question, whether Zipporah

* The newly-discovered Seti tablet has proved beyond dispute the exact succession of the kings of the 18th Dynasty, and of those of the 19th down to the time of Ramesses the Great, as clearly as the succession of the kings of England may be shown from the windows of the House of Lords.

the Midianite and the Ethiopian woman were not one and the same, which seems to be supported by the juxtaposition of the two countries in Habakkuk iii. 7. But this does not touch the real point at issue, viz., as to the possibility of Moses being the general of the "Pharaoh's daughter" who had preserved him as an infant, had adopted him as her son, and who subsequently became the only queen regnant of the long line of the Pharaohs mentioned in history. It is certain from Mariette's discovery of the palace walls of that celebrated queen, with their beautiful pictures of the campaign against the Ethiopians, that a war between Egypt and Ethiopia was one of the marked incidents in her reign. And since Josephus and Irenæus both mention as an historical fact that Moses conducted the campaign against Ethiopia before he fled to Midian when he was forty years old, I think we may fairly assume that the picture of the general of the Egyptian army may be none other than he who subsequently became far more celebrated both as a general and a lawgiver during his forty years' rule of the Israelites in their march to the promised land.

As Mr. Graham alludes to an objection that has been brought against the truth of the Mosaic record of Pharaoh having given "*camels*" to Abraham, "on the ground that at that time the camel was not known in Egypt," though he very justly points out the weakness of such an argument, I would wish to mention that Osburn has detected this animal in an inscription on the Temple of Karnac, belonging to the reign of Thothmes III., the contemporary of Moses, as it reads, "Three camels' loads were brought to the king this year ;"* but I have not been able to discover any earlier authority for the camel being known to the Egyptians save the statement in the book of Genesis, and which is amply sufficient for any candid and unbiassed mind.

It only remains for me to notice what was said by Mr. Dunbar Heath, not because he specified any objection to my paper, but because he affirmed that "Mr. Titcomb's chronology was substantially correct ;" and he added:—"a most remarkable coincidence which tends greatly to *strengthen the proof of this chronology*, and which is a distinct point of great interest in itself, is that Manepthah II., the monarch of the Exodus, was the son of a man who was the brother of a person whose sarcophagus we have in the British Museum, and who was governor of Palestine, which belonged then to Egypt." In reply to this singular chronological conclusion I would mention that M. Lieblein, a great authority with those who disregard all Biblical chronology, has fixed the date of Ramesses II. (the father of Manepthah II.) at 1134 B.C. See *Zeitschrift*, 1869, p. 122. This would bring the date of Manepthah's reign (the British Museum possesses an inscription of the 66th year of his father's reign, showing that it was a very long one) down to the middle of the 11th century, just when David was ascending the throne ; and thus, according to this strange chronological scheme, Moses and David

* The Papyrus Anastase I., of the time of Ramesses II., commonly called "the Great," likewise has mention of the "Camel."

are made contemporaries, which must rejoice the hearts of all who are opposed to accepting the simple narrative recorded in Scripture !

Although Mr. Dunbar Heath spoke of his "*Exodus Papyri* with considerable diffidence, yet he mentioned so many extraordinary things in the few words which he addressed to the meeting that I will reply to him in the words of Canon Cook, a most competent judge, in his *Essay On the Bearings of Egyptian History upon the Pentateuch* :—

"It was quite natural to expect that, if the Israelites were settled in Goshen, or had been very lately expelled, when those documents were written, some notices of them would be found,—some allusions at least to the events preceding the Exodus. Accordingly, a writer (Mr. Dunbar Heath, *Papyri of the Exodus*), to whose industry and ingenuity we are indebted for some of the first attempts to decipher and explain the select papyri, believed, and for a time persuaded others, that he found abundance of such notices. He speaks of a true, original, and varied picture of many of the very actors in the Exodus ; a Jannes mentioned five times, a Moses twice, a Balaam, son of Zippor, and the sudden and mysterious death of a prince-royal, &c. Since his work was written, all the passages adduced by him have been *carefully investigated, and every indication of the presence of the Israelites has disappeared*. The absence of such indications supplies, if not conclusive, yet a very strong argument against the hypothesis which they were adduced to support."—See *Speaker's Commentary*, vol. i. pp. 468-9.

THE MOABITE STONE.

A short statement relating to this stone will not be out of place here, more especially as none of those who took part in the discussion on Mr. Savile's paper replied to the question put by the Chairman in his introductory remarks (page 107).

On the 19th of August, 1868, the Rev. F. A. Klein, attached to the Jerusalem Mission Society, was travelling through the country of Moab ; and on arriving at Dibân (Dibon), heard of an inscribed stone never yet seen by a European ; on examination, he found it to be "in a perfect state of preservation, and it was only from great age and exposure to the rain and sun that certain parts, especially the upper and lower lines, had somewhat suffered." The size of the stone was about 44 inches by 28 by 14. Mr. Klein took no drawing of the stone, but mentioned the matter to the Prussian Consul at Jerusalem, and various fruitless negotiations—in which Captain Warren very judiciously abstained from taking a part—were entered into with the Arabs with a view to getting possession of the stone, and sending it to Berlin. In 1869, however, the Prussian Consul obtained a firman for its removal, but in the meanwhile the protracted negotiations had aroused the jealousy and cupidity of the Arabs, and in November, when M. Ganneau sent a messenger with squeeze-paper to obtain an impression of the inscription, "whilst the paper was still wet, a quarrel arose amongst the Arabs, and the messenger, tearing off the wet impression, had only time to spring upon his horse and escape by flight, bringing with him the squeeze, imperfect, and

in rags, and receiving a spear-wound in the leg. After this the Arabs lighted a fire under the stone, and throwing water upon it, broke it into fragments." Since then, squeezes have been taken of the two large and certain smaller fragments ; and as the matter now stands, out of the 1,000 letters inscribed on the stone, 669 have been preserved. At present, July, 1872, the fragments are stored in a room at the consulate at Jerusalem, and are the property of M. Ganneau, who has refused an offer of £300 for them made by the British Museum : it may be interesting to add that he has recently reported having deciphered the name of David on one of the fragments. M. Deutsch, speaking of the stone, says :—" It is an enormous gain to palæography and Semitic science, and it is unquestionably the very oldest Semitic lapidary record of importance as yet discovered, and apart from certain geographical and other data given in it which are already incontestable, it illustrates, to a hitherto unheard of degree, the history of our own writing—I mean that which we all use at this hour. Nearly the whole of the Greek alphabet is found here ; not merely *similar* to the ' Phœnician ' shape, but as identical with it as can well be. Not merely such letters as the Α Ρ Μ Ν Σ Ε Ο Q (Koppa), &c., but even the Ζ—one of the letters supposed to have been added during the Trojan war by Palamedes, because not extant in the original ' Cadmean ' alphabet—is of constant occurrence here (as *Samech*). Further, will the knotty digamma question receive a new contribution by the shape of the ς in this monument, which is distinctly the Greek ς—another letter of supposed recent origin. . . . And another thing will become clear, viz., that the more primitive the characters, the simpler they become ; not, as often supposed, the more complicated, as more in accordance with some pictorial prototype."

I forbear giving any of the various translations of portions of the inscription, because until the whole of the fragments are recovered (but few are now wanting), all attempts at translation must be premature, and can only lead to controversy and dispute ; before quoting from M. Deutsch's valuable remarks made at Oxford, I may add that, speaking generally, the inscription " not merely confirms or illustrates the narrative of the Second Book of Kings, but it adds to our knowledge."

M. Deutsch alluded to the number of decipherments and translations, hypotheses and suggestions, to which this stone had already given rise, and dwelt upon the fact that, apart from the precise date of this King Mesha, which indeed was still a moot point, very little was doubtful of that which really existed on or of the stone. The chief difficulty and the variance of opinion arose from the questionable letters, the gaps, and lacunæ, though even these could scarcely affect the general gist of the monument. Its language was easy and translucent even to a beginner, though, will-o'-the-wisp like, words suddenly appeared which, either from false transcription or some other cause, not merely interrupted, but seemed to subvert the whole meaning and structure. He had from the very outset, and for very good reasons, ventured to beg the world at large, as well as the learned, not to be hasty. The great fact of this intensely important find was clear at first sight ; also

that the monument was that of a Moabite king—Mesha—who, after a brief record of himself and his father, tells of certain deeds of war from which he issued victorious ; further, that the names of Israel, Omri, Chemosh, and a number of well-known Moabite cities occurred up and down ; and that indeed the greater part of the last half of the stone was a record of the kings' [re-]buildings of and improvements in these cities ; while the very defective end seemed once more to speak of war. If he had lifted up his warning voice then, he, notwithstanding all that had come between—emendations, chips, squeezes, dissertations, pamphlets, &c.—would still beg a little patience before a final and definite conclusion could be arrived at on all points, if ever that could be the case, inasmuch as there were some more materials extant, which had not as yet been taken into consideration. There was, *e. g.* (besides M. Ganneau's not yet published corrections) a certain chip acquired by Captain Warren some time before his "squeezes," which did not figure in any of the known texts, and which seemed to belong to the right-hand corner—a matter on which a decision could only be arrived at when the other pieces had been brought home. Besides this, he would draw the attention of his hearers to certain fragmentary lines of Mr. Klein, which also appear in none of the materials extant, and which, if accurately copied, would be of some considerable import. Thus one line seemed to exhibit the word "*Ratzim*" (runners, military executioners, "footmen" in O. T.) in a connection which seemed to point to some sanguinary work after a battle, while another distinctly read "Tamar to [Je]richo." There was no need to think of Tadmor. Tamar was the place mentioned by Ezekiel as the south-western limit of Palestine, and the juxtaposition of the two cities in question would be rather significant. But, M. Deutsch said, it was to be hoped that these lines had survived the original, and were among the recently-acquired new fragments, so that full opportunity might be given for further examination. He had mentioned these facts to show that everything was not settled yet, and so long as there was any hope of the recovery of one single scrap of material, so long must the final investigations remain in abeyance.

The most important places in the Bible where reference is made to the people and country of Moab are Numbers xxi. 26 ; xxii. and xxiii. ; Deut. ii. 9 ; Judges iii. 17 ; xi. 15, *et seq.* ; 1 Sam. xiv. 47 ; 2 Sam. viii. 2 ; 2 Kings i. 1 ; iii. 4-27 ; xiii. 20 ; xxiv. 2 ; 2 Chron. xx. ; Isa. xv. ; xvi. ; Jer. xlviii. ; Dan. xi. 41 ; Amos ii. 1, 2.

NOTE.—For much of the preceding, I am indebted to an interesting work, "The Recovery of Jerusalem," published under the superintendence of the deservedly popular "Palestine Exploration Fund." Those who may desire to know more in regard to the country of Moab, are referred to the Rev. J. L. Porter's "Giant Cities of Bashan ;" Mr. Grove's article on "Moab" in the "Dictionary of the Bible ;" and to M. Deutsch's letters in Nos. V. and VI. of the "Quarterly Statement of the Palestine Exploration Fund."

It will interest many to know that the expedition to the country of Moab—to which I alluded during a former discussion, see vol. v., p. 408,—has just returned.

F. PETRIE, ED.

INTERMEDIATE MEETING, FEBRUARY 20, 1871.

CHARLES BROOKE, ESQ., F.R.S., VICE-PRESIDENT, IN THE CHAIR.

The Minutes of the last Meeting were read and confirmed.

The following Elections were then announced :—

MEMBER :—Major I. P. Carruthers Wade, 6, Wemyss Place, Queen's Gardens West, Edinburgh.

ASSOCIATES (2ND CLASS) :—G. Harries, Esq., Richestone, Milford Haven (Life Associate) ; Miss Jessie H. Beckwith, Spring Bank, Malvern ; Rev. J. H. Tremlett, M.A., D.C.L., the Parsonage, Belsize Park.

Also, the presentation of the following works for the Library :—

- “Proceedings of the Royal Institution of Great Britain,” Parts 52 and 53.
From the Institution.
- “Cruden's Concordance” (large Edition). *From H. T. Bagster, Esq.*
- “A Sketch of a Philosophy,” Part I. By the Rev. J. G. MacVivar, D.D.
From the Author.
- “The Variations of the Angular Divergencies of the Leaves of the ‘Helianthus tuberosus.’” By the Rev. G. Henslow, M.A., F.L.S.
From the Author.
- “What is Matter ?” *From R. S. Falconer, Esq.*

The Rev. G. HENSLow then delivered a lecture, of which the following is the substance. It is inserted here in accordance with a special resolution passed by the Council.

**PHYLLOTAXIS; OR, THE ARRANGEMENT OF
LEAVES IN ACCORDANCE WITH MATHEMATICAL LAWS.** By the Rev. GEORGE HENSLow, M.A.,
F.L.S., F.G.S.

INTRODUCTION.

THE subject of the present paper is one which generally proves void of much attraction, except to those botanists who are interested in mathematical calculations. It may, therefore, be advisable to preface a few words in explanation of its appearing in the *Transactions of the Victoria Institute*.

The Rev. Walter Mitchell's interesting lecture on the Bee-cell, delivered at the Anniversary Meeting of 1870, drew from the writer a few remarks tending to show that the fact of organic forces acting under some impulse, and producing exact results, though rare under any circumstances, was not confined to the animal kingdom, but occurs also in the arrangement of leaves.

It was in consequence of these remarks that I was requested to bring before this Society some more detailed account of the principles of this remarkable phenomenon, or, as it has been called, *Phyllotaxis*, and so furnish the members of the Victoria Institute with a paper as companion to, though by no means so equally attractive as that of Mr. Mitchell on the bee-cell. That an insect should possess the power of practically, yet unconsciously working out for its own purposes a high mathematical problem is probably the most mysterious of Nature's gifts to her creatures. The bee knows nothing of geometry, and we can only say that it acts instinctively under direction. The cell is one of the rare examples of the issue of organic forces being rigidly demonstrable by aid of the exact sciences.

In the mineral kingdom, on the other hand, it is the rule, rather than the exception, to find the issue of natural forces, either singly or in their resultant, to be capable of mathematical expression; *e.g.*, the crystallographic forms of minerals.

But when we turn to the vegetable kingdom, we are again amongst organic forces, and we look about almost in vain for results which can be tested by mathematics or which can be represented by their formulæ. The most remarkable instance is probably the arrangement of leaves, and which forms the subject of the present paper.

1. If several leafy shoots from different plants be taken, it will be observed that many, probably the majority, have their leaves placed one at a time on the stem; or, as botanists say, *alternately*; e.g., the Garden Flag, a Sedge, the Oak, and the Holly. The rest will almost always have two leaves at the same position (or *node*), but situated on *opposite* sides of the stem; e.g., Lilac, Privet, or Horse-chestnut. Of the latter, it will be also noticed that *each pair of leaves stands at right angles to those above and below it*. Such series of pairs of opposite leaves constitute what has been called the *decussate* arrangement. Extended observations will only strengthen the conclusion that leaves are for the most part *alternate* or *opposite*.*

2. *Alternate Leaves*.—If I take a branch of the May or Oak, and hold it vertically with any selected leaf before me, and then pass my finger upwards along the stem from that leaf to the next, and thence to the third, fourth, fifth, and sixth leaf in succession, I find that the one last reached (sixth) is exactly over, or in the same vertical line with, the first; and if I proceed further, I shall find the seventh is vertically over the second, the eighth over the third, and so on, the eleventh being, therefore, over both the sixth and first.

3. The following observations will result from this examination:—Obs. 1. All the leaves on the branch are arranged in *five* vertical rows: from this fact such an arrangement has been called *pentastichous*. Obs. 2. The imaginary line traced by the finger in passing from leaf to leaf successively is *a spiral line*. Obs. 3. This spiral line *coils twice* round the stem before arriving at the sixth leaf; the portion of the spiral intercepted between the first and sixth leaf is called a *cycle*. Obs. 4. A cycle *contains five leaves*, the sixth being the first leaf of the succeeding cycle.

4. The method adopted to represent this arrangement is by means of the fraction $\frac{2}{5}$. The numerator (2) indicates *the number of coils in a cycle*. The denominator (5) *shows the number of leaves in a cycle*.

5. Let a complete cycle be projected on a plane surface, and represented by a "helix" (a spiral line like a watch-spring) having two complete coils, and let the corresponding positions of the leaves be marked upon it. Then if radii be drawn from the centre to the positions of the leaves, the angle between those drawn to any two successive leaves will be two-fifths of a whole circumference, or of 360° ; i.e. it will contain 144° . From this fact, the fraction $\frac{2}{5}$ is called the *angular divergence* of the pentastichous arrangement of leaves. An observation of

* Leaves will occasionally be found grouped in threes or some higher number; they are then said to be *whorled* or *verticillata*.

some importance may be here conveniently made; *viz.*, that each coil (*i.e.* the circumference of a circle) contains *three* leaves; this same number is invariably true for all other arrangements of the "primary" series, as will be hereafter described.

6. Let another example be taken. Suppose it to be a sedge (*Carex*). Here the fourth, seventh, tenth, &c., leaves will all be found arranged vertically over the first; the fifth, eighth, eleventh, &c., over the second; and the sixth, ninth, twelfth, &c., over the third. Hence there will be only *three* vertical rows of leaves, and the name given to this arrangement is consequently *tristichous*. Moreover, it will be observed that there are but *three* leaves in each cycle, and that the cycle completes but *one* coil or circle in passing from any leaf to the next immediately over it; so that by adopting the method given above, of representing this arrangement by a fraction, the fraction will be $\frac{1}{3}$, and the angular divergence will be $\frac{1}{3}$ of 360° , or 120 degrees.

7. By extending such observations as these, we should soon discover other arrangements of leaves to exist in nature; and we should find that their angular divergences are equally capable of being represented by fractions. Thus, in the Garden Flag (*Iris*), the leaves are on opposite sides of the stem, but are "alternately" arranged, as no two stand at the same level. This, therefore, will be represented by $\frac{1}{2}$, because in passing from one leaf to the next, an entire semicircle is traced, and from the second to the third another complete semicircle; so that the third leaf (which commences the next cycle) is over the first. This arrangement is consequently called *distichous*, as all the leaves on the stem will be in two vertical rows, and on opposite sides of the stem. In another kind, a cycle will coil *thrice* round the stem, and contain *eight* leaves; hence $\frac{3}{8}$ will represent the angular divergence. Another is found to be $\frac{1}{5}$, and several more exist.

8. If the fractions thus constructed from actual examination of plants be written down in succession according as the numerators and denominators increase, they will be seen to form a series with remarkable connections between its component fractions. It will be as follows:— $\frac{1}{2}$, $\frac{1}{3}$, $\frac{2}{3}$, $\frac{1}{4}$; such I have elsewhere* proposed to call the primary series. It cannot fail to be noticed that the sum of any two successive numerators, or of any two successive denominators, forms that of the next fraction respectively, so that we might extend this series indefinitely; thus: $\frac{1}{2}$, $\frac{1}{3}$, $\frac{2}{3}$, $\frac{1}{4}$, $\frac{3}{4}$, $\frac{1}{5}$, $\frac{4}{5}$, $\frac{2}{5}$, $\frac{3}{5}$, $\frac{1}{6}$, $\frac{5}{6}$, $\frac{2}{6}$, $\frac{4}{6}$, $\frac{3}{6}$, &c. It will be also observed that the numerator of any fraction is the same num-

* *On the Variations of the Angular Divergences of the Leaves of Helianthus tuberosus*. By the Rev. George Henslow. *Transactions of the Linnean Society*, vol. xxvi. p. 647.

ber as the denominator next but one preceding it. There yet remains one more remarkable connection between them, *viz.*, that these fractions are the *successive convergents* of the *continued fraction*

$$\frac{1}{\frac{1}{2} + 1} - \frac{1}{1 + 1} + \frac{1}{1 + \frac{1}{2} + \text{&c.}}$$

That is to say, if we reduce, by the ordinary rules for simplifying fractions, the portions

$$\frac{1}{2}, \frac{1}{2+1}, \frac{1}{2+1}, \frac{1}{1}, \frac{1}{1+1}, \frac{1}{1}$$

and so on, the resulting fractions will be the same as those given above.

9. I have said that the above series of fractions represent the arrangements which exist in nature, and it is not usual to find any species departing from the arrangement which may be characteristic of it; in other words, the phyllotaxis of any species is constant to that species. The following are illustrations :—

- †. *Iris*, or Flag. The glumes (chaff) of all grasses. Some “orchids.”
- †. *Carex*, or Sedge. Leaves of several grasses.
- ‡. Oak, Hawthorn. This is one of the commonest arrangements.
- ‡. Holly, White Lily, Greater Plantain. A common arrangement amongst mosses.
- ††. *Convolvulus tricolor*. Many orchids. Male fern.
- ††. Scales of Spruce fir-cone. Ribwort Plantain (*Plantago lanceolata*).
Yucca. Some mosses.
- ††. Hoary Plantain (*Plantago media*).

10. If, now, a semicircle be described, and one extremity of its diameter represent the position of any leaf, assumed as the first; and if a radius be drawn at the 180° angular distance of 120° from this point, then the point where the radius meets the circumference will be the position of the second leaf of the tristichous arrangement. The opposite extremity of the diameter will be that of the second leaf of the distichous arrangement. And these points form the extreme positions for the second leaves of spirals of the primary series, corresponding to the fractions $\frac{1}{2}$ and $\frac{1}{3}$ respectively. No *second leaf* ever lies nearer to the first than 120°,

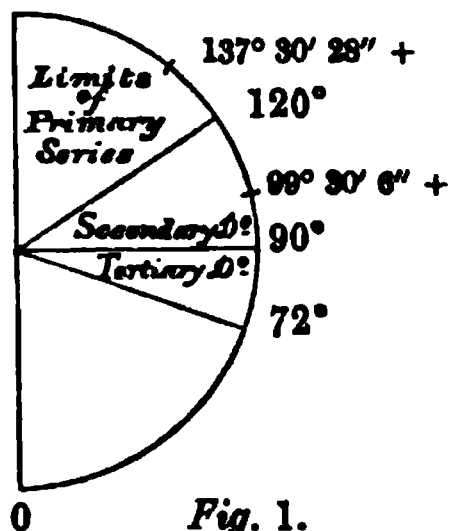


Fig. 1.

nor further than 180° .* The positions of all the second leaves are upon the arc included between those extreme points (*viz.*, 120 and 180 degrees from the extremity of the diameter corresponding to the position of the assumed first leaf). Thus: for the pentastichous, as we have seen, it is at an angular distance of 144° ; for the $\frac{2}{5}$ divergence the second leaf is at an angular distance of 135° , while the positions of the second leaves of the spirals, represented by the consecutive fractions $\frac{1}{15}$, $\frac{2}{11}$, $\frac{3}{8}$, &c., gradually approximate to some intermediate point on the arc, but which no known example ever reaches. That point will be understood, by mathematicians, to represent the "limiting" value of the continued fraction $\frac{1}{2+\frac{1}{1+\frac{1}{1+}}}$ &c., or $\frac{3-\sqrt{5}}{2}$ of 360° , or $137^\circ 30' 28'' +$

11. Occasionally, other fractions must be constructed to indicate peculiar arrangements, and which cannot be represented by any one of the fractions of the primary series given above. I discovered the Jerusalem Artichoke to be a plant which, unlike most species having their own peculiar arrangements constantly the same, offered the most singular variety. Not only were some leaves *opposite*, *i.e.* in pairs at right angles, but also in *threes*, all on the same level; and when this was the case, they followed the same law regulating their positions, as already mentioned in the case of opposite or decussate leaves; *viz.*, that the leaves of each group of three *alternate in position* with those of the groups above and below them; I have called† this arrangement *tricussate*. But besides these two kinds, the leaves on many stems were arranged *alternately*, and could be represented by the fractions $\frac{1}{3}$, $\frac{2}{5}$, $\frac{3}{8}$, &c. But more than this; for I found that the fractions $\frac{2}{7}$, $\frac{3}{11}$, $\frac{4}{15}$, and others were likewise to be frequently obtained. Now these latter are obviously part of an analogous or *secondary* series; and if continued would stand thus: $\frac{1}{4}$, $\frac{2}{7}$, $\frac{3}{11}$, $\frac{4}{15}$, $\frac{5}{19}$, $\frac{6}{23}$, &c.

12. This secondary series will be seen, on comparing it with the primary, to differ in commencing with the fractions $\frac{1}{3}$, $\frac{1}{4}$, in place of $\frac{1}{2}$, $\frac{1}{3}$; but afterwards, each successive fraction may be written down as in the primary series by simply adding the two successive numerators and denominators respectively.

13. If, now, we project on a plane a cycle of any one of the spiral arrangements represented by a fraction of this secondary series, as in the case of $\frac{2}{7}$, we shall find that *a complete circumference will invariably contain four leaves instead of*

* If the second leaf be at a greater distance than 180 , and not less than 240 degrees from the first, it will be seen that the conditions are simply reversed, and the spiral will then run round in the opposite direction.

† *Op. cit.*

three. And, moreover, the angular divergence of any leaf from the next in succession will be found in a similar manner to be *that* fractional part of 360° . Similarly, just as all angular divergences of the leaves of the primary series lie between 120° and 180° inclusively, all those of the leaves of the secondary series lie between 90° and 120° ; the limiting point being at an angular distance from the first leaf of $99^\circ 30' 6'' +$. Lastly, it must be observed that the fractions of the secondary series are the successive convergents of the continued fraction :

$$\frac{1}{3} + \frac{1}{1 + \frac{1}{1 + \&c.}}$$

14. In a manner analogous to the above, we might construct a *tertiary series*, commencing with the fractions $\frac{1}{4}, \frac{1}{5}$, and which would then appear as follows :— $\frac{1}{4}, \frac{1}{5}, \frac{2}{9}, \frac{3}{14}, \frac{5}{23}, \frac{8}{37}, \&c.$ Such a series, however, does not exist in nature, as far as I am aware. Having, then, before us three analogous series, it is obvious that we might construct any number of such series, and finally all would be represented by the algebraical forms, where a is any number :

$$\frac{1}{a} \quad \frac{1}{a+1} \quad \frac{2}{2a+1} \quad \frac{3}{3a+2} \quad \frac{5}{5a+3} \quad \&c.$$

These fractions being the successive convergents of the continued fraction

$$\frac{1}{a+1 + \frac{1}{1+1 + \frac{1}{1+\&c.}}}$$

15. In all the preceding investigations, I have supposed the space between any two successive leaves on the stem to have been sufficiently developed to enable me to trace an imaginary spiral line through the leaves. But it sometimes happens that such spaces, called *internodes*, are so short or are practically wanting, that the leaves become crowded together, so that it is quite impossible to say which is the second leaf after having fixed upon some one as the first. This is especially apparent in the case of fir-cones, where the scales may be considered as the representatives of leaves, and which, though crowded, are arranged in a strictly mathematical order.

16. If a cone of the Norway spruce fir be held vertically, the scales upon it will be observed to run in a series of parallel spirals, both to the left hand and to the right. This is a result of their being crowded together, as well as of their definite arrange-

ment. It is the object of the observer to detect and represent that order by some arithmetical symbol. This may be done by attending closely to the following directions:—Obs. 1. Fix upon any scale as No. 1, and mark the scale which lies in *as nearly a vertical line over it as possible, viz.*, numbered at 22. Obs. 2. Note the scales which are *below, nearest to, and overlap* that scale (No. 22). Obs. 3. Run the eye along the two *most elevated* spirals, one to the right hand, the other to the left; and passing through these scales which overlap the scale numbered 22.* Obs. 4. Count the number of spirals (called secondary) which run round the cone parallel to these two spirals just observed; there will be found to be eight such parallel spirals to the right, and thirteen to the left, inclusive respectively of the two first noticed.

17. From these observations, a rule has been deduced for obtaining the fraction which represents the angular divergence of the so-called "generating" spiral which takes in every scale on the cone, in a manner similarly to those described above. Rule: The sum of the two numbers of parallel secondary spirals, *viz.* $13 + 8$, or 21, forms the denominator, and the lowest, 8, supplies the numerator; so that $\frac{8}{21}$ represents the angular divergence of the generating spiral. From this it is obvious that the scale immediately over No. 1 will be the 22nd, and this must commence a new cycle.

Fig. 2.

* These spirals are shaded in the figure so as to render them more conspicuous; *viz.*, the spiral 1, 9, 17, 25, &c., to the right; and 1, 14, 27, 40, &c., to the left. I have said *the most elevated spirals*, because, had I chosen the spiral passing through the scales 1, 19, 37, 55, &c., or 1, 6, 11, 16, &c., the object of search would not have been obtained.

18. If the object of our search be only the discovery of this representative fraction $\frac{8}{13}$, or the angular divergence of the generating spiral, then all that is required will have been done; but in order to prove the truth of the rule given above, we must proceed to affix numbers to every scale, and so put it to a rigid test. We have, then, to show that the first cycle of the spiral line passes through *twenty-one* scales before arriving at No. 22, which stands immediately over No. 1. Secondly, the cycle must coil *eight* times, or complete eight entire circumferences in so doing.

19. *Method of Numbering the Scales.*—Assuming there to have been 8 parallel secondary spirals to the *right*, and 13 to the *left*, as in fig. 2, the process of affixing a proper number to each scale on the cone is as follows:—Commencing with No. 1, affix the numbers 1, 9, 17, 25, 33, 41, 89, 97, 105, &c., on the scales of the secondary spiral passing through it to the right; these numbers being in arithmetical progression, the common difference being 8, or the number of such parallel spirals; thus all the scales on one of the secondary (as shaded) spirals will have numbers allotted to them. In a similar manner, affix the numbers 1, 14, 27, 40, 53, &c., on the successive scales of the secondary spiral *to the left*, using the common difference 13. Thus we shall have two secondary spirals intersecting at No. 1, and again at No. 105, with every scale properly numbered. From these two spirals all other scales can have proper numbers affixed to them. Thus, add 8 to the number of any scale, and affix the sum to the adjacent scale, *on the right hand of it*. Similarly, add 13 to the number of any scale, and affix the sum to the adjacent scale, *on the left hand of it*; e.g., if 8 be added to 40, 48 will be the number of the scale to the *right* of it, so that 40 and 48 are consecutive scales of a secondary spiral parallel to that passing through the scale 1, 9, 17, &c.; or if 13 be added to 25, 38 will be the number of the adjacent scale; i.e., on the spiral parallel to that passing through 1, 14, 27, &c. By this process, it will be easily seen that every scale on the cone can have a number assigned to it. When this has been done, if the cone be held vertically and caused to revolve, the observer can note the positions of each scale in order (1, 2, 3, 4, &c.); and he will then find that the cone will have revolved *eight* times before the eye will rest upon the 22nd scale, and which lies immediately over the first.

20. This experiment, then, proves the rule for the artificial method of discovering the fraction $\frac{8}{13}$, which represents the angular divergence of the “generating” spiral.

21. We may also remember that there must be 21 vertical rows of leaves. These may generally be seen without much

difficulty by holding the cone horizontally, and looking parallel with its axis, when the twenty-one rows of vertical scales will be observed, somewhat in appearance like the rows of grains in a head of Indian corn.

22. I have said that the 22nd scale will be found immediately above, but not accurately in the same vertical line, with the one selected as No. 1. That it cannot be precisely so is obvious from the fact that $\frac{1}{21}$ of 360° , or $137^\circ 31' +$, is not an aliquot part of a circumference; the consequence is, that the 22nd leaf must stand a little out of the vertical line, and of course the 43rd will be double that distance, and the 64th treble the amount, and so on. Hence it results that this supposed vertical line is in reality a highly-elevated spiral line, and instead of there being 21 actually vertical rows of scales, there will be 21 very elevated spirals (see fig. 2).

23. That the rows of leaves on any stem may be strictly vertical, the arrangement must be represented by some fraction the denominator of which measures 360° , such as $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, and $\frac{1}{6}$; whereas $\frac{1}{17}$, $\frac{1}{19}$, &c., represent spirals in which no two leaves are ever in the same vertical line exactly.

24. As a general rule, all leaf-arrangements on stems with well-developed internodes can be represented by some one of the fractions $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, and $\frac{1}{6}$: whereas those with undeveloped internodes, as in the scales of cones, thistle-heads, &c., are represented by higher members of the series, such as $\frac{1}{17}$, $\frac{1}{19}$, $\frac{1}{21}$, &c.

25. I must now turn to the other condition under which leaves are arranged, namely *opposite*. When this is the case, each pair of leaves, as has been stated above, stands at right angles to the pairs above and below it. Some plants have, either normally or occasionally, three or more leaves on the same level. When this is the case, the leaves of each group stand over the intervals of the group below it; i.e., they alternate with the leaves of the groups both above and below it.

26. This kind of arrangement is best seen in the parts of flowers, all of which are homologous with, or partake of, the same essential nature as leaves, and which, when complete in number, are separable into four sets of *organs*, called the four *floral whorls*; viz., *calyx* of *sepals*, *corolla* of *petals*, *stamens*, and *pistil* of *carpels*. It appears to be an invariable law that the parts of each whorl should alternate with those of the whorls above and below them. Indeed, so impressed are botanists with the persistency of this law, that when the parts of any one of the floral whorls stand immediately in front of the parts of a preceding external whorl, they at once infer that an intermediate whorl has disappeared. This is conspicuously the case in all primroses and cowslips, and other members of

the family to which they belong; wherein it will be noticed that each stamen is affixed or adherent to the tube of the corolla, but immediately in *front* of a petal, and not *between* two petals. That this idea of the suppression of another whorl of stamens is not without foundation, it may be observed that in the flowers of a little denizen of damp meadows, *Samolus Valerandi*, and akin to a primrose, has rudimentary stump-like organs which stand affixed to the corolla, and alternate with the petals; while the true stamens alternate with the former; and therefore, as in the Primrose, stand immediately in front of the petals. In the Primrose itself, no trace of any such suppressed whorl of stamens is ever apparent. In a large number of plants which are habitually—normally—without a corolla, the stamens, as would be expected, stand in front of, and not alternating with, the sepals.

27. Although the organs of flowers are usually grouped in distinct whorls, yet in many are they spirally arranged; and when this is the case, they can be represented by some fraction of the series given for alternate leaves.*

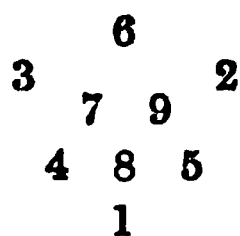
28. A point now to be particularly observed, is that these two arrangements, *viz.* the “spiral” and the “verticillate” (or “whorled,” including the “opposite”), appear to be due to forces acting independently of each other; for it is rare to find whorls passing into spirals, and still rarer for spirals to pass into whorls,—if, indeed, it ever occurs.

29. The Jerusalem Artichoke, however, furnishes many illustrations of the former process, and in some instances of the latter, though no *gradual* transition from a spiral to ‘verticillate’ or opposite conditions ever occurred in the cases examined.

30. A description of a few examples will be sufficient to enable it to be understood how a passage from opposite or verticillate leaves into spiral arrangements can be effected. Ex. 1. The change from the opposite (decussate) leaves into the $\frac{1}{2}$ divergence. This occurred somewhat frequently as follows:—A pair of leaves slightly converge to one side, the angular distance between them being about 150° . The succeeding pair likewise converge, but have a somewhat less angle, one of the leaves in each case becoming slightly elevated by the development of an internode; so that the sixth leaf now appears over the first, or the lowest leaf of the first pair that converged to one side. It must be noted that the angles between the radii drawn to the position of the converging leaves do not accurately contain 144° ,

* A point worthy of note is, that the *free portions* of the corolla of a primrose *overlap* one another in just such a way as corresponds to the $\frac{1}{2}$ arrangement of spiral leaves; though, of course, they are actually verticillate.

or $\frac{1}{2} \times 360^\circ$. But as the spiral arrangement is continued up the stem and into the terminal bud, the leaves seem to "right" themselves, as it were; so that the appearance of the spiral in the neighbourhood of the summit is more accurate than at the point of departure from the highest pair of opposite leaves. Ex. 2. Change from the tricussate arrangement into the $\frac{1}{2}$ divergence of the secondary series. A change from verticils of threes into the $\frac{1}{2}$ was frequent. It takes place in the following manner:—The first step is to cause the three leaves of the different whorls to separate slightly by a development of their internodes. Then, if any two consecutive whorls be examined, the order of succession of the six leaves (No. 1 being the lowest) is thus:—



In which it will be noticed that the fourth leaf, instead of being over the interval between the first and second, is over that between the third and first, so that the angle between the first and second leaf, or between the second and third, is *double* that between the third and fourth. These latter, it will be remembered, are separated by a long internode. The same order obtains with the succeeding whorls; the nodes, however, are now much more widely separated, while a true spiral arrangement, with the same angular distance between all its leaves, is ultimately secured, and is henceforth continued uninterruptedly into the terminal bud, and represented by the fraction $\frac{1}{2}$.

31. From very many observations on stems of the Jerusalem Artichoke, it appears that to resolve opposite and decussate leaves into spirals of the primary series and tricussate verticils into those of the secondary series is more easily accomplished than any other kinds of transition. To reverse the process, or to bring back spirals into verticils, seems quite contrary to all nature's tendencies to change. Stems of the Jerusalem Artichoke occasionally had their leaves arranged spirally below, and verticillate above; but then the change was abrupt. The spiral suddenly terminated, and the last leaf was succeeded by three in a whorl.

Conclusion.—I have now endeavoured to give a brief and as clear account as I can of the main facts and principles of Phyllotaxis. But, if we venture to search for a *cause* of such definite and exact arrangements of leaves, it will probably be fruitless, for as yet no satisfactory explanation has ever been given. It is not enough to say that it is a wise arrangement that leaves should not all be over one another, so as to exclude

the light and air, and impede each other's functions; or that the alternate arrangement is an obviously wise method of securing a larger development of "blade" and conditions equally favourable to all. Nevertheless, it is fact that when leaves *are* crowded, or verticillate, they very often appear less capable of sustaining much development of surface.* But this might presumably have been attained without the strictly mathematical positions which alternate leaves have assigned to them.

We may, then, ask two questions, both of which are at present unanswerable. First, why does a leaf of any spiral amongst ordinary plants stand at an angular distance varying from 120° to 180° from the next to it on the stem? Secondly, why does it take up an accurate or definite position on the arc between those limits, and is not to be found *anywhere* along that arc?

All that can be said is, that such is the case in nature, and that when the angles between any two successive leaves of all the different generating spirals are measured, and represented as fractional parts of the circumference, they are found to bear such relations to one another when written down in succession, as obtain between the successive convergents of a continued fraction of the general form:— $\frac{1}{a} + \frac{1}{\frac{1}{1} + \frac{1}{\frac{1}{1} + \&c.}}$

Whatever our speculations, as to the cause of Phyllotaxis, may be, the fact nevertheless remains, and, like the beautiful structure of the bee-cell, testifies to the truth that "God's ways are past finding out," though bearing witness the while by its general invariability to the prevalence of law, and by its exactness and functional value to the power and wisdom of the Law-Giver.

A discussion ensued, in which Mr. J. Reddie, Mr. A. V. Newton, the Rev. C. A. Row, Dr. J. A. Fraser, Mr. Hubert Airy, and the Chairman took part: the Rev. G. Henslow replied.

The Meeting was then adjourned.

* *e.g.* The "orders" *Coniferae*, *Galiaceae*, and in the genera *Hippuris*, *Myriophyllum*, and *Callitriche*.

ORDINARY MEETING, MARCH 4, 1872.

CHARLES BROOKE, ESQ., F.R.S., VICE-PRESIDENT, IN THE CHAIR.

The Minutes of the last Meeting were read and confirmed ; and the following elections were announced :—

MEMBERS :—JOHN ELIOT HOWARD, Esq., F.L.S., Lordship Lane, Tottenham ; Rev. G. S. ROWE, 20, George Road, Edinburgh.

ASSOCIATES :—Rev. W. BRODIE, M.A. (Trin. Coll. Camb.), the Vicarage, East Meon, Petersfield ; Rev. C. A. BURY, B.A., Sandown, Isle of Wight.

Also the presentation to the Library of the following books :—

| | | |
|--|-----------|--------------------------|
| <i>Proceedings of the Royal Society.</i> | Part 131. | <i>From the Society.</i> |
| <i>Proceedings of the Society of Biblical Archaeology.</i> | Part 1. | <i>Ditto.</i> |

The CHAIRMAN.—As the paper which is now about to be read specially refers to the published opinions of Sir John Lubbock, the Council invited him to attend this meeting ; and I have received a note in which he thanks us for our invitation, but regrets that a prior engagement renders it impossible for him to be present. Therefore we shall not have the pleasure of hearing what he has to say in defence of his own views.

The following paper was then read by the Author :—

PREHISTORIC MONOTHEISM, considered in relation to Man as an Aboriginal Savage. By the REV. J. H. TITCOMB, M.A.*

SIR JOHN LUBBOCK, in his *Origin of Civilization*, lays down certain assertions respecting the religious characteristics of the races of man which are so clearly contrary to the experience and testimony of many trustworthy witnesses, that I shall devote this paper to a refutation of them. The

* The proceedings of this Meeting are inserted here, as the paper read thereat takes up some points in Sir John Lubbock's theory which were not dealt with in a paper "On Civilization, Moral and Material." See page 1.—Ed.

object of that eminent writer was, as we all know, to establish the aboriginal degradation of the human family ; to prove that its first stock was not only savage in manners, but without one spark of real religious knowledge, such knowledge being gradually acquired only after ages of successive development. In order to test this, he very properly makes the whole question turn upon the nature of a belief in Deity. Thus, on page 136, he says :—

Hitherto it has been usual to classify religions according to the nature of the object worshipped : Fetichism, for instance, being the worship of inanimate objects ; Sabæism that of the heavenly bodies. The true test, however, seems to me to be the estimate in which the Deity is held.

2. Let us adopt this test. Nothing can be fairer, as a matter either of philosophical or ethnological inquiry ; nor can anything, in my judgment, be more thoroughly decisive of the controversy. According to the theory of Sir John Lubbock, the first stage in the religious thought of man is one of total ignorance, and unconsciousness concerning God. This he calls *Atheism*, p. 136. The next stage is that in which “man supposes he can force the Deity to comply with his desires.” This he calls *Fetichism*. The third stage is that in which “natural objects, trees, lakes, stones, animals, &c., are worshipped.” This he calls *Totemism*. The fourth stage is that in which “the superior deities are far more powerful than man, and of a different nature, and whose places of abode are far off.” This he calls *Shamanism*. The fifth stage is that in which the gods take the nature of man, but are still far more powerful, being regarded, however, as amenable to persuasion. These gods are a part of nature, but not creators, and are represented by idols. This he calls *Anthropomorphism* or *Idolatry*. The sixth stage is that in which the Deity is considered, “not merely a part of nature, but the author of nature ; and, for the first time, becomes a really supernatural being.” The last stage is that in which “morality is associated with religion” (p. 137).

3. Now, according to this sort of graduated religiousness, the measure of which follows an ascending, not descending scale of growth, we have a right to demand some visible exposition of such line of growth wherever we prosecute historical or ethnological research. For example, we have a right to expect that no morality will be found associated with religious belief in any nation before the development of Totemism and Anthropomorphism, or Idolatry. Again, that no idea of one Supreme and Supernatural Deity will appear until after all the previous lower stages have been first traversed. In view, therefore, of

the fact that some of these higher and lower stages of religious belief often actually co-exist in the same age, and among the same people, we have to trace, as far as possible, which of them has had historical priority. Sir John Lubbock—assuming what he desires to prove, rather than proving it—slips into the following easy observation:—

Where man, either by natural progress or by the influence of a more advanced race, rises to the conception of a higher religion, he still retains his old beliefs, which linger on side by side with, and yet in utter opposition to, the higher creed. The new and more powerful spirit is an addition to the old Pantheon, and diminishes the importance of the older deities; gradually the worship of the latter sinks in the social scale, and becomes confined to the ignorant and the young.

4. Remarks like these glide easily from the pen of a ready writer; but you will observe that they consist entirely of assertion. The fact of a contemporaneous mingling together of higher and lower beliefs in certain countries justifies us in making no *à priori* conclusion as to which came first in point of order. According to the dogmatic statement of Sir John Lubbock, a transfer from inferior to superior faith has been universal. But is this opinion historical? Do the evidences furnished by ethnological research confirm this view? Taking the higher or lower estimates of belief in a Deity as the crucial test of this great question, what do facts proclaim concerning it?

5. Such are the inquiries which I propose to prosecute in the present paper.

6. One instance of a contemporary co-existence of higher and lower religious belief is to be seen in Madagascar, where the natives, though they were found in the 17th century worshipping their departed ancestors, and reverencing charms and idols, yet possessed the knowledge of a Supreme and Supernatural Deity, whose attributes directly connected religion with morality. Robert Drury, who was shipwrecked upon Madagascar in 1702, and remained there as a slave till 1717, and whose narrative is universally received as trustworthy, tells us that the name by which this Supreme Being is known signifies "*the Lord above*," between whom and mankind there are four mediators. Now this, according to Sir John Lubbock's theory, marks a high and later development of religious belief, which could only have been reached after a passage through the lower stages of savagery. We have a right, therefore, to expect some historical proof of this order of sequence; or evidence, at least, of some sort, beyond the bare assertion of such a statement. So far from this,

however, while the worthy baronet quotes Robert Drury with evident satisfaction in order to bring out the present more debased features of the Malagassy native religion, he entirely suppresses Drury's testimony just quoted. Which, then, came first—the baser or the purer faith? Was this higher religious belief attained by progress, or was it the remnant of some nobler creed lost by degradation? Dismissing all hasty speculation and unsafe generalization, let us endeavour to see what conclusions we may draw from actual facts. Of course, in a country which has neither history nor monuments, and where even traditions of the past are vague, it would be unsafe to look for facts in that direction. The only other source of evidence thereupon lies in those old proverbs and ancient sayings which come down through successive generations in almost all countries as a kind of moral inheritance from the past. Aristotle speaks of proverbs, *e. g.*, as “fragments of an elder wisdom, which, on account of their brevity and aptness, have been preserved amidst wreck and ruin.”* But are there such proverbs in Madagascar? And if so, do they bear testimony to the priority of Fetichism and Totemism, or to that of purer and nobler faith? One of their proverbs runs thus:—“Do not consider the secret valley, for God is overhead;” in which the truth of Divine Omniscience is evidently recognized. Another recognizes the Supreme Deity as Ruler and Disposer of events:—“The wilfulness of man can be borne by the Creator; for God alone bears rule.” Another says: “Better be guilty with men than guilty before God;” which directly implies a belief both in Divine Holiness and Justice. Now you will bear in mind that these are not modern sayings which have resulted from missionary labour, but old and indigenous, and common throughout the country, older far than the present idolatrous system of Madagascar, which is of comparatively modern date, some of their idols having been introduced within the memory of the people who were living at the time when our first missionaries entered the island.† Thus we have clear evidence of a primeval Monotheism underlying a subsequent degradation of religious belief in Madagascar, the higher coming first, and the lower being brought out afterwards,—a discovery which is the very opposite to the assertion so dogmatically laid down by Sir John Lubbock and others of the same school.‡

7. Let it not be thought that in using this language I am

* Quoted by Archbishop Trench, *Proverbs and their Lessons*, p. 30.

† *Madagascar and its People*. By James Sibree.

‡ It might be relevant to remark that even Christian men, after being among Fetishers, are apt themselves to be influenced by Fetishism.

more anxious to snatch an argumentative triumph, or to defend a theological position, than to search honestly and dispassionately after truth. On the contrary, it seems to me that this is just the snare into which that particular school of which Sir John Lubbock stands forth as so able an exponent is in danger of falling ; for, carried away by another line of evidence into those distant regions of antiquity where man's remains lie embedded amidst marks of primeval barbarism, that school seems incapable of tolerating any opposite opinion. Hence, when questions of aboriginal belief come up for discussion, a theory such as that presented in the opening of this paper is arbitrarily framed, in order to harmonize with the supposed savage origin of man ; and pains are not sufficiently taken to make a careful inquiry into other facts of the case which might possibly tend to overthrow that theory. In other words, this school of thought, when looking upon the condition of barbarous nations, instinctively seize hold of their grosser superstitions, and unconsciously disregard any underlying proofs of their having had a higher aboriginal faith indicative of some primeval moral civilization. Thus, Sir John Lubbock, when speaking of the Kaffirs, not only affirms that there is no appearance of any religious worship among them,* but quotes the following testimony of a Zulu :—

Our knowledge does not urge us to search out the roots of religion ; we do not try to see them ; if any one thinks ever so little, he soon gives it up, and passes on to what he sees with his eyes.†

The object of the writer is to express the almost innate incapacity of these Zulus to hold any religious belief, and so to place them on the lowest line of his programme, viz. Atheism. Yet the present Bishop of Natal, in a paper published during 1855, says :—

Like other Kaffirs, the Zulus have no idols, and it has been a common charge against them that they have no gods. I know not what may be the case with the frontier Kaffirs, but the Zulus have certainly two distinct names for a Supreme Being, viz. Unkulunkulu, or "The Great, Great One," equivalent to "Almighty"; and Unvelinganga, or "The First Outcomer," equivalent to the "First Essence." They spoke of Him to me repeatedly, and quite of their own accord, as "The Maker of all things and of all men."

Such was the testimony of the Bishop in 1855, exhibiting a state of things which is totally at variance with the allegation that these Kaffirs are without any religious conceptions. Sir J. Lubbock does not quote this evidence. On the contrary, he

* Page 141.

† Page 143.

makes an effort to show, from a separate source, that *Unkulunkulu* is merely the name of the first man—the Zulu Adam, in fact,—and that it is not the name of a Deity at all.* I prefer the testimony, however, of such a man as Bishop Colenso on this point, whose bitterest enemy could not even charge with any undue amount of credulity in matters of religious belief.

8. Now I ask, whence this higher conception of faith, in the midst of all other kinds of religious unconsciousness? According to my opponent, there are only two replies: 1. It may have been gradually attained through successive stages of progress. But, if so, where are the proofs of that progress? We have the phenomena presented to us here of nothing except the highest and lowest terms in Sir J. Lubbock's series of religious beliefs; the interval, which ought to be filled up with Fetichism, Totemism, Shamanism, and Idolatry, being a complete blank. Or, 2. It may have come through the influence of a more advanced race. But, if so, where are the proofs of that influence? Is it natural, or even possible, that this advanced race should have impressed upon these savages their own intellectual conceptions of the Deity, and yet have left them no other heritage of civilization? Every reasonable evidence of this Prehistoric Monotheism among the Kaffirs, therefore, is in favour of its underlying rather than overlying their present barbarism; and so far bears witness to their having been aboriginally possessed of a higher culture.

9. The same may be said of the Dyaks of Borneo, who have no system of idolatry, and in many respects appear to have no sense of religion.† Yet the writer of *Life in the Forests of the far East*, who lived long in Borneo and knew it well, says:—

They have a firm, though not clear belief in the existence of one Supreme Being, who is above all and over all. In fact, all my inquiries among the wild tribes of Borneo confirm me in the opinion that they believe in a Supreme Being.‡

Now this being so, I ask whence did they derive so high a conception of faith? If they gained it according to Sir John Lubbock's theory of progressive stages in religious belief, where are the intermediate links? Or if they obtained it from contact with a race superior to themselves, why do we find no

* Page 240.

† See Sir J. Lubbock's *Origin of Civilization*, p. 258.

‡ Vol. i. p. 169.

other marks of civilization among them ? A careful consideration of the case seems to leave us no other conclusion than that this form of Prehistoric Monotheism simply remains among them, in the midst of all their barbarism, as an indelible remnant of that higher aboriginal culture, from which in the course of ages they have so sadly degenerated.

10. To show that I do not unduly press this argument, and that Sir John Lubbock really does enforce the necessity of idol-worship entering into a nation as a stage of religious belief, before morality is connected with religion, thereby excluding all anterior possibility of a Monotheistic faith, let it be observed that, after describing the lowest or Atheistic stage, he goes on to speak, on page 242, of religion being "greatly raised in importance" by Fetichism ; afterwards, on page 248, he adds, "The next stage in religious progress is that which may be called Totemism ;" he then says, on page 252, "As Totemism overlies Fetichism, so does Shamanism overlie Totemism ;" and subsequently, on page 256, he tells us, "The worship of idols characterizes a somewhat higher stage of human development." It is not till he has crept up to page 291 that he discovers that highest stage of all, when there enters belief in a "Beneficent and Just Being," who connects Morality and Religion. Hence, if words mean anything, the whole theory of Sir John Lubbock must stand or fall by the place which Prehistoric Monotheism occupies in the order of religious beliefs. I say prehistoric ; for if it were a matter of clear authentic history, there would be no dispute about it. The entire discussion consists in our fairly grappling with those loose and disjointed evidences which crop up here and there, either among those savage nations which have no history at all, or else among those anciently civilized nations which flourished before authentic history begins.

11. Let us turn to this latter class, commencing with the ancient Chinese empire. Sir John Lubbock, quoting Astley, says :—

It is observable that there is not to be found in the Chinese canonical books the least footstep of idolatrous worship, till the image of Fo was brought from China several ages after Confucius (p. 258).

This is true. In proof of it I may mention that there exists in China a very ancient work, called *Pokootoo*, comprising sixteen volumes, which, though they contain several hundred pictures of jugs, vases, and bottles, of the Shang, Chow, and Han dynasties, comprehending a period of 1784 years B.C. (no small portion of them being intended for use on the altars), yet there is not found one vessel in that work with an idolatrous

mark upon it. Such being the case, it ought to be impossible for us to discover any abstract conceptions of a deity during that period, or, at all events, any which connect a Supernatural Being with the principles of religious morality. Nevertheless, in *Shoo-king*, the second of the Chinese sacred books, which Confucius remodelled out of older documents, allusion is made no less than thirty-eight times to some great Power or Being, called *Shang-te*, which means "August or Sovereign Ruler." * Moreover, as there depicted, this *Shang-te* has heavenly chiefs underneath him, who are presidents of heaven, and earth, and the sea; and the people are enjoined to worship Him as the Sovereign Lord of Heaven. In opposition to this statement it is said that the modern Chinese regard the *Shang-te* as a name for the mere material heaven, which they worship as a kind of animated deity. That fact, however, furnishes no just argument as to the correct interpretation of what Confucius taught in his edition of the ancient *Shoo-king*, and still less as to what its original principles consisted in. Indeed, the language of that work leaves it almost impossible for us to regard *Shang-te* as a mere "anima mundi," ever giving the processes of nature, and receiving worship only as a collective embodiment of all the spirits; for to Him especially was ordained the sacrifice *Loöe*, while other sacrifices were separately offered to the spirits of the mountains, rivers, &c. Besides which, He is described as possessing personally a high measure of intelligence; and as exercising some degree of moral government, "punishing the evil and rewarding the good." † Now this form of thought is totally at variance with the later notions of the Chinese, which treat the essence of the Divine Being as an unintelligent, will-less principle. And it is quite as much at variance with Sir John Lubbock's theory, which makes the belief in a Supreme Personal Deity impossible before an age of Idolatry.

12. Nor is this the only testimony as to the contents of the *Shoo-king*, and the doctrine of Confucius; for Bellamy, in his *History of all Religions*, ‡ quotes one part of the *Shoo-king*, in which there is the following significant description of God:—

Independent Almighty, a Being who knows all things; the secrets of the heart not hidden from Him.

In which few words, you will observe, are comprehended the perfections of the one Supreme Deity. To the same effect spoke Confucius:—

Heaven has not two suns; earth has not two kings; a family has not

* Hardwick's *Christ and other Masters*, Part III., p. 39.

† *Idem*, pp. 37—39.

‡ Page 134.

two masters ; sovereign power has not two directors. There is one God, and one Emperor.

In which words it is idle to say that the Divine Being described is an impersonal, unintelligent essence. Language like this is indicative of a knowledge of true Monotheism, which, however it may have been gradually mixed up with pantheistic ideas, or subsequently lost in a host of idolatrous conceptions, is quite sufficient to prove that, in the sequence of religious beliefs, the higher was not evolved from the lower, but preceded and underlaid it.

13. Let us now pass to ancient India. Speaking of the modern Hindoos, Sir J. Lubbock reminds us that they pay honour to almost every living creature. "The cow, the ape, the eagle, and the serpent receive the highest honours ; but the tiger, elephant, horse, stag, sheep, hog, dog, cat, rat, peacock, chameleon, lizard, tortoise, fish, and even insects, have been made objects of worship." All this is very true, and we might ourselves add very much more. It is a land of ultra-polytheistic degradation. Its gods are numbered by millions. It would have been more to the purpose of his own argument, however, if Sir John Lubbock had shown that, while the Fetichism, the Shamanism, and the idolatries of India had been growing during twenty centuries, the age preceding that period was one of Atheistic belief or of total religious unconsciousness. That is the position which he has laid down* as the natural origin of civilization, and he is bound in consistency to maintain it.

14. Yet nothing can be further from the truth. Moreover, it is a truth so universally known, that it seems incomprehensible to me how a man of Sir John Lubbock's attainments could have refused to anticipate the rejoinder of his critics, and to say something at least upon the subject by way of self-justification. For every student of philosophy and ethnology is aware that, although the earliest Hindu worship was that of nature, yet it was not the sun, nor moon, nor fire, nor water, which were worshipped as things material, but only as the emblems or abodes of one Supreme Being, towards whom the hearts of all worshippers should be turned.

The Polytheism of these Vedas, says Creuzer, is dissolved into Monotheism.†

The very vastness of the Hindoo mythology obliges it to be inconsistent. It is an effort to represent a Being who can only be grasped by an infinite

* See the first page of this paper.

† Quoted in Hunt's *Essay on Pantheism*, p. 8.

thought. Were it consistent, its failure would be still more signal, the many being but fractions of the one, and this one an infinite spirit. It therefore takes refuge in poetry, and struggles to utter, by luxuriant similitudes, what language cannot with accuracy express.*

Coleman, in his *Hindoo Mythology*, says the same thing (p. 1):—

The early writers exhaust language in endeavours to express the lofty character and attributes, and the superlative power and dignity of this great unity—the highest conception of which man is capable. He is spoken of as “The Almighty, Infinite, Eternal, Incomprehensible, Self-existent Being—He who sees everything, though never seen—He who is not to be compassed by description—He from whom the universe proceeds—who rules supreme—the Light of all lights—whose power is too infinite to be imagined—the One Being—the True and Unknown BRAHM.”

The *Rig-Veda* is generally acknowledged to be about 3,000 years old. It is a collection of prayers and hymns. One prayer runs thus:—

May my soul, which mounts aloft in my waking hours as an ethereal spark, and which, even in my slumber has a like ascent, soaring to a great distance as an emanation of the Light of lights, be united by devout meditation with the Spirit supremely high and supremely intelligent.†

And in one of its hymns on Creation, the same Infinite Spirit is thus spoken of:—

Who knows, and shall declare when and why
This creation (ever) took place?
The gods are subsequent to the production of the world.
Who, then, can know from whence
This varied world comes?
He, who in highest heaven is Ruler *does* know:
But not another can possess that knowledge.

15. I will only give one other illustration, taken from the *Bhagavet Geeta*, which is an episode in the great national poem called the *Mahabharatta*, and is certainly between two and three thousand years old. In this part of the poem *Arjun*, the hero, is addressed in the following language:—

I am the Creator of all things, and all things proceed from me. I am the beginning, the middle, and the end of all things; I am time; I am all-grasping death; and I am renovation.

* Quoted in Hunt's *Essay on Pantheism*, p. 8. † *Idem*, p. 7.

Arjun, in pious ecstasy, exclaims :—

Reverence, reverence be unto Thee a thousand times repeated. Again and again reverence. O thou who art all in all ! Infinite in Thy power and glory ! Thou art the Father of all things animate and inanimate. There is none like unto Thee.

16. I am quoting this as pure Monotheism. Those who are familiar with the translation of these ancient Hindu writings must be well aware that they strangely combine both Pantheism and Monotheism ; and that all their pantheistic idealism is more or less polytheistic also. But, though this be the case, they are nevertheless devoid of that deformed and debased animal-worship which afterwards came into usage, and which we still see everywhere throughout Hindustan. So far from this, the *Rig-Veda* shows us that the character of the early Hindu people was one which craved after things unseen and eternal. Dissatisfied with this transitory existence, they sought a world without change, and endeavoured to grasp the Infinite. And though the elements and powers of nature personified were the first gods of the Aryan race, the minds of the worshippers passed beyond those material and external objects into the One Supreme Spirit who nourished nature in Himself.*

17. From whence, then, I ask, were these high and lofty conceptions of religious faith derived ? According to Sir John Lubbock's programme, they represent a late phase in the development of civilization ; and they ought to have been preceded by a series of changes, beginning with Atheism and Fetichism. As to what preceded the Hindu Vedas, we know nothing. All we can say is, that the earliest dawn of Aryan mythology presents us with a far finer faith in Supernatural Deity than the wearisome ages which succeeded it ; and that, consequently, the modern theory of man's degraded origin so far breaks down under the light of prehistoric Monotheism.

18. From ancient India, let us now pass to that of Egypt. In this country we have the singular phenomenon presented to us of an idolatrous system of animal-worship which not only did not precede any purer faith in times of less perfect civilization, but appears to have been gradually evolved out of that purer faith as its visible exponent and delineator. Wilkinson observes that the fundamental doctrine of ancient Egypt was the Unity of the Deity ; but that, inasmuch as the attributes of that Deity were represented under positive forms, there arose a

* See Hunt's *Essay on Pantheism*, p. 5.

multitude of deified objects.* Plutarch gives an illustration of this in regard to the worship of the crocodile, telling us, according to the notions of those days, that as that creature had its eyes covered over by a thin transparent membrane, by means of which, though living in the water, it could see, and yet not be seen, it was taken as a representation of the Invisible and Omniscient God.† *Ex uno disce omnes*. The instances which might be adduced are numberless.

19. It may possibly be contended that high conceptions of the Deity like these were after-thoughts of a more advanced age, which deeper thinkers skilfully fitted in to previous superstitions with a view to redeem them from their grossness. But, however ingenious such an idea may be, in order to make the theory of Sir John Lubbock and his school go on all-fours, I beg to recall those gentlemen from theory to fact, and from speculation to reason.

20. Nothing can be clearer than that the earliest gods of Egypt, although they were symbolically represented as hawk-headed, ram-headed, or frog-headed, were nevertheless worshipped under human forms. The monuments prove this. The further subdivision of representative deities under the figures of animals was the effect of a later religious development, resulting in part from pantheistic and in part from intellectual movements; and against which the minds of some of the Egyptians revolted, as being opposed to the honour of that One Supreme Deity which had been before figuratively venerated under the higher forms of anthropomorphism. Thus Plutarch says of the people of Thebes, that—

Whilst other Egyptians paid their proportion of tax imposed upon them for the nourishment of sacred animals worshipped by them, the inhabitants of Thebes refused, because they acknowledged no mortal god, and only worshipped Him whom they called Kneph, the unmade and Eternal Deity.‡

Professor Rawlinson speaks rightly when he says :—

The deity once divided, there was no limit to the number of his attributes of various kinds, and of different grades; and in Egypt everything that partook of the divine essence became a god. Emblems were *added* to the catalogue; and though not really deities, they called forth feelings of respect, which the ignorant could not distinguish from actual worship. §

* Wilkinson's *Egypt*, vol. i. p. 327 (small edition).

† Quoted in Cudworth's *Intellectual System*. ‡ *Idem*.

§ Rawlinson's *Herodotus*, App. to Book II. p. 250.

Well might the more polished Thebans, therefore, protest against such additions, by refusing to pay taxes for their support, especially in view of such noble relics of the earlier empire as those presented in Memphis and its neighbourhood, where the temples often contained statues which prompted worshippers to silence and stillness, and taught the secret and incomprehensible nature of the Supreme God; and on which inscriptions were read like that in the temple of Isis at Sais—"I am all that hath been, is, and shall be; and no man hath uncovered my veil,"*—reminding those who drew near to Him that there was a unity and eternity in the Supreme Being which no mortal man could fathom.

21. Egypt lent her best thoughts to the early Greeks, such as Thales, Pythagoras, and others. We may therefore expect to read the same refined conceptions of Deity in the fragmentary remains of the philosophers which have been handed down to us. And so we do. Thales, who lived in the 5th century B.C., held a sort of Pantheistic-Monotheism, declaring, on the one hand, "All things are full of God; and on the other, "God is the oldest of all things because He is unmade."† Pythagoras spoke more plainly—"God is One, and All-in-All; the Light of all power; the Beginning of all things; the Father, Life, Mind, and Motion of the universe." His whole school held Mind to be the first great cause. The Eleatic school, which followed, spoke still more distinctly. Xenophanes, the founder of this school, declared that "God was an Infinite Being, unlike man in shape and thought, being all sight, and ear, and intelligence."‡ Passing onward, we come to Plato, whose language was more unmistakably monotheistic. He speaks of "the Architect of the world"—"the Sovereign Mind which orders all things"—"the Greatest of the Gods"—"He that produceth all other things, and even Himself;" thus bringing out the doctrine of a Supreme Deity who was self-existent.

22. It will, of course, be contended that all these splendid conceptions of Deity were the result of an intellectual development following those lower forms of Polytheism which appear in the Pantheisms of Homer and Hesiod. In some respects, no doubt, they were the growth of ideal truth. But if this observation be intended to assert that there was no Monotheistic faith underlying the earlier Polytheism of the nation,

* This well-known inscription has been preserved for us by Plutarch, in his *De Is. et Osir.*

† Preserved in Laertius, lib. i.

‡ See Hunt's *Essay on Pantheism*, p. 61.

then I meet it by a quotation from Aristotle, Plato's greatest pupil, who refutes it in language which absolutely crushes and overwhelms this objection of our 19th century speculators. Had Aristotle been gifted with a spirit of prophecy, and desired to rebut the ethnological philosophy of Sir John Lubbock, he could not possibly have written words which more completely tear into shreds his entire theory and programme of ancient religious beliefs. Aristotle says :—

*It has been handed down to us from very ancient times that the stars are gods ; besides that supreme Deity which contains the whole of nature. But all the other things were fabulously added ; for the better persuasion of the multitude, and for utility of human life and political ends, to keep men in obedience to civil laws. As, for example, that the gods are of human form, or like to other animals.**

23. Two things come out from this language which I think it impossible to gainsay. First : That a belief in one Supreme Deity had been handed down from remote antiquity, and was the general persuasion of the civilized Greeks. Secondly : That all the observations of this higher conception of Deity, either by anthropomorphous or animal idolatry, had been simply *additions* to that primitive Monotheism. Thus Aristotle turns the theory of Sir John Lubbock bottom upwards ; and, instead of making man in remote ages a blind and degraded savage, who lived in a state of atheistic unconcern, and then by degrees crawled into the light through Fetichism, Totemism, &c., he looked upon remote antiquity as handing down the superior light, and upon later generations as obscuring and disfiguring it.

24. I know not whether it is necessary for me to add more. If it were, I might easily double or treble the length of this paper, which has already grown sufficiently long. I might take you into ancient Scandinavia, of whose inhabitants Mallet, in his work on the Northern nations of Europe, says :—

The *most ancient* mythology taught the being of a Supreme God, master of the universe, to whom all things were obedient and submissive ; called in the old Icelandic literature, Author of everything that exists, the Eternal, the Being that never changeth.

I might take you to ancient Mexico, of which Prescott writes :—

The Aztecs recognized the existence of one Supreme Creator, and Lord of the universe ; addressing him as “the Omnipresent,” that knoweth all thoughts, and giveth all gifts, invisible, incorporeal, under whose wings we find sure repose and defence.

* Aristotle, *Met.*, lib. xiv., cap. 8.

I might take you among many tribes in America, of whom Squier, in his *Archæological Researches*, says :—

The attributes given to the Supreme Spirit in whom they believe are not less lofty than those assigned to the Indian Brahm. They seldom mention His name, and then with the greatest reverence.

25. But why should I enter further upon these topics? Enough has surely been said to prove both the truth of Prehistoric Monotheism and its inevitable tendency to overthrow the modern ethnological dogma of the aboriginal savagery of man. If this conclusion falls in with the teaching of Scripture, it is satisfactory to know that we have used no Scriptural evidence in order to establish it. We have merely dealt with facts—facts which ought to be well considered by a class of students who are disposed, on other considerations, to overlook them. That the evidence which has been here adduced, although brief and compressed in its character, may induce our opponents to reflect upon their position, and at least pay greater respect to those who differ from them, has been one great object of the author in writing this paper for the Victoria Institute.

The CHAIRMAN.—I am sure we have listened with very great interest to the able exposition of this subject which has just been addressed to us. I think we must all feel great satisfaction that the points which have been elsewhere raised, and which are so entirely subversive of all our ideas of the progress of religious belief, have been thus controverted and refuted, and I feel assured that you will join with me in a cordial vote of thanks to Mr. Titcomb. I will repeat what I have already stated, that as this paper directly controverts the opinions of Sir John Lubbock, who was invited to be present here to-night, in order that he might speak for himself. We shall now be happy to hear any observations that either members of the Institute or visitors may wish to make.

Dr. E. HAUGHTON.—The point which it has occurred to me to bring forward is in reference to the statement made by those who hold Sir John Lubbock's views, that the Dyaks, Zulus, various African tribes, and the natives of Patagonia, have no religious belief at all, with which I cannot agree, for it always seems to me that those persons who assert that particular tribes have no religious belief, put themselves into a particularly difficult position, because they undertake to prove a negative,—asserting, because they have not found a particular thing, that therefore that particular thing does not exist. It is just as though some one were to say : “ I undertake to prove that such and such a murder has not taken place, because I did not see it happen, nor do I know any one who did.” But the instances which are adduced in the paper before us go to show the proper way of dealing with these objections, because it appears that both these tribes—both Dyaks and

Zulus—have a much better notion of religious belief than has been generally attributed to them. I have read something about the Dyaks, and they appear to have a very strong opinion upon the subject; for when ten missionaries went to Borneo to preach Christianity, a deputation of the natives waited upon them, and suggested that as the missionaries were only ten in number, it would be better for them to cease creating a disturbance and commotion by preaching novel doctrines, and to at once adopt the religion of the Dyaks, when they would all be able to get along comfortably and peacefully together. (Laughter.) That looks as if the Dyaks, instead having no religious belief at all, had a very strong one. It will be found in the case of many savage tribes, that the notion of their having no knowledge of the Deity arises from the want of proper information as to their customs, habits, and feelings.

MR. I. T. PRICHARD.—I would like to ask one question. I have not read Sir John Lubbock's book, and wish to know whether he makes the assertion that anywhere, in any part of the world, so far as our researches have gone, there has been found any race possessing no idea of a God?

REV. J. H. TITCOMB.—Oh yes. He makes that assertion most distinctly.

MR. PRICHARD.—Then I think it is a matter for extreme regret that he is not here to-night to support his views by argument; because, so far as my researches, or reading go, I have never, that I can recollect, come across a single instance of the kind. I do not know of a single tribe, in any part of the world, that has been altogether without some knowledge of the Deity. The most barbarous races that I ever heard of, and the most debased—those tribes, for instance, which are to be found in the northern part of Asia, in the wildest parts of Siberia—clearly have some notion of a Supreme Being. I remember reading the old travels of the Jesuits who passed through that country several hundred years ago, and who described the condition of the people; and there was clearly an idea of the Deity among the rudest of these people. Certainly the worship was very rude, but it was a worship of the Supreme Being. The only ceremony connected with it that they had any idea of performing was the sacrifice of a horse or some other animal; that creature they would kill, and then they would suspend portions of the carcase upon the trees of the forest for a certain time, and pay them a certain amount of veneration; after which they would devour them. That is an example of the greatest debasement I ever read of in any country in the world. Among books of travel, I give the first place to the Abbé Huc's travels in China; but the next place I give unquestionably to a book by an American gentleman connected with the electric telegraph, called "Tent Life in Siberia." He left California, and travelled over part of Siberia, which was a *terra incognita*, where he fell in with many wandering Koraks, who are the natives of those regions; and he says most clearly and distinctly that they have an idea of the Deity; he mentions a display of the Aurora Borealis, and the feelings with which those people regarded the phenomenon, proving distinctly that they had a very strong feeling about the existence of God. I

repeat that it is to my great astonishment that so learned and well-known a man as Sir John Lubbock could possibly have made the assertion which I am told he has. With regard to the question of the ancient Hindoo mythology, to which I have paid more attention than to any other of the points now before us, I can corroborate the arguments of Mr. Titcomb on that subject. That mythology is now very much debased, and a school has sprung up among the Hindoos who revert to the original mythological belief of the Vedas ; but the present worship is derived from books called the Purans, written at present in Hindee, though some of the older ones were possibly written in Sanscrit. These books constitute the scriptures of the present Hindoos, and they contain quaint stories of demons and gods, and genii ; but the original religion of the Hindoos was something very different, and I cannot conceive any nearer approach to inspiration, that the mind of man is capable of making by its own efforts, than the religious philosophy of the Vedas, and the belief of the most ancient Hindoos. The idea of the Deity contained in the older forms of religion is a grand conception, but the present Hindoo religion is extremely debased. If we go to the Mahomedans, who occupy so large a portion of the religious world, we all know that one of the main purposes of Mahomet was to overthrow, as far as he could, the idolatry that had arisen in Arabia ; and his efforts were the outcome of the purer growth of Monotheism which had existed before. I can only repeat my regret that we cannot hear Sir John Lubbock to-night, because he seems to me to have taken up a position which is quite untenable. (Cheers.)

MR. TITCOMB.—As I have attacked Sir John Lubbock, it is only fair that I should so far defend him as to say that he is not without warrant in his assertion that the testimony of others is in his favour. In pages 141 and 142 of his book, he says that there is the testimony of various travellers to the point, and he quotes Robertson, who, speaking of America, says that several tribes had been discovered there with no idea of religion. At the same time, I quite agree with Mr. Prichard in not believing the assertion to be a statement of fact.

DR. J. A. FRASER.—As no one will defend Sir John Lubbock, I may be allowed to say that I do not think Mr. Titcomb's paper goes into the pre-historical question, for all its arguments are drawn from historical times. We have references to the Aztecs and to the Scandinavians ; but these peoples were surely within reach of history in one sense of the term, and certainly the civilized Greeks, and even the Egyptians, are.

REV. C. A. ROW.—Sir John Lubbock refers to all these nations in his book.

DR. FRASER.—But they are not pre-historical. I quite believe that, so far as historical times are concerned, the farther back we go, the more monotheistic does religion become. Now Sir John Lubbock says :—

“The new and more powerful spirit is an addition to the old Pantheon,

and diminishes the importance of the older deities ; gradually the worship of the latter sinks in the social scale, and becomes confined to the ignorant and the young."

I think that that is a most questionable statement. It seems to me that if we look back to what history tells us, we shall find that the older worship diminished in popularity, and in the belief of the great mass of the people ; it became confined rather to the initiated and the learned, and that was a step which was certainly retrogressive, and not advancing. In one passage, reference is made to Unkulunkulu, described by Sir John Lubbock as the Zulu Adam. But it should be borne in mind that one of the earliest forms of worship that we can trace is that of deified man. There, at any rate, you have but one being worshipped under the form of man, it is true, for the savages knew no other being but man, and therefore they made him into a god ; so that, even going back so far as that, we still have the monotheistic idea. Then, if we take the religions of Babylon and Assyria, Sir Henry Rawlinson tells us that the purest form of their worship is dualism. No doubt there were two principles,—that of good and that of evil ; but the evil principle very rarely appears. He is only alluded to once in the ancient inscriptions which have been found, whereas the principle of good is constantly alluded to. While the principle of good, Ormuzd, is very generally found, Ahriman, the principle of evil, occurs only once ; and that shows that the form of worship was certainly not polytheistic. My main objection, however, to Mr. Titcomb's paper is that it does not go far enough back, and I have no doubt that would be Sir John Lubbock's answer to it ; that he is referring all the time to a far more remote period than any dealt with in this paper.

Mr. Row.—I have not read Sir John Lubbock's book very lately. I own that the term "pre-historic" is somewhat misapplied, seeing that a great deal of its illustrations are derived from historic times. The general principle of Sir John Lubbock's work seems to be this : to go over the whole of the existing savage races and to infer, from the theology of the savage races which now exist, what was the theology of the earliest races which do not now exist. If the inquiry be simply as to what opinions were held by prehistoric man, the inquiry, in one sense, would be absurd, because if we have no history we cannot tell what the people believed,—that is inevitable. (Laughter.) But I wonder at the logic of Sir John Lubbock. No doubt it is possible to travel over all the existing savage races of mankind, and reduce their various religious beliefs into such a system as Sir John Lubbock has propounded, which has seven branches. No doubt you can systematize the absurd beliefs of savage races in this way if you like, but it by no means follows that you are therefore entitled to invert the cone, so to speak, and to say that atheism was the earliest form of belief in the mind of the first original savage, and that religious belief went on developing itself upwards in a continually improving form, until we come at last to pure monotheism. This seems to me to be vicious reasoning, and I do not understand on what principle a man is entitled to take the existing beliefs of savage races, to range them in his own

order, and then to say "The order in which I have arranged these beliefs is the order in which they sprang into being, from the beginning of man down to the present day." (Cheers.) I cannot see on what principle such an inference could possibly be maintained. There are a great number of things of this kind on which Sir John Lubbock bases his theory, and there are many instances quoted in his book in support of his argument; but still, with respect even to the present races of mankind, it is difficult for strangers going among savages to form any correct estimate of their religious beliefs. Nothing is more difficult, and it is not likely to conduce to the discovery of truth, to take up a number of reports which many people of various degrees of accuracy have made—many of them being quite unsupported—and then to draw a conclusion from them. It would be more to the purpose to find out what were the earliest beliefs of historical man to which there is something like testimony. I cannot suppose that there was any law which regulated beliefs in prehistoric times in a different manner from the way in which they have been ruled in historical times; and if you cannot prove in historical times that religious beliefs advance from low to higher forms, I do not see why you are to adopt another view in the case of prehistoric times. If I can show that there is a tendency in historical times to descend from higher to lower forms, then I conceive I am not entitled to say that a contrary process went on in prehistoric times. Why is it that in historical times religious beliefs have retrograded? for it is a fact that they have done so. We can appeal to the universal voice of history and show that a great number of beliefs, which we can prove to have existed in the earlier periods, have, instead of developing themselves from low to high, taken the opposite direction, and descended from high to low. Mr. Titcomb is well acquainted with the religion of Egypt, and who can doubt that the earlier theism of the Egyptians was not much more perfect than the religion which existed in the historic times of the Ptolemies and even during the first three centuries of our era, when it was one of the most degraded forms of polytheism known upon the earth? It is certain that there was a higher form of religion in the earlier ages. In the same way, you can turn to India, and you can fairly assert that the earlier forms of Hindoo belief approached far more nearly to monotheism than they did later on; and that, instead of a development of improvement, they underwent one of retrogression. Of course, if all religions are subject to laws of development, I suppose that persons who hold these views consider that the Jewish and the Christian religions are both subject to the same laws, and I am fairly entitled to argue with them on their own ground. Let me ask, Were not the earlier forms of Judaism much higher and more elevated than the Judaism that existed in the time of our Lord; and, in one word, whether Judaism has invariably developed itself upwards or in an opposite direction? Take another example—that of the Christian church itself—because I assume that I am now reasoning with people who say that both Judaism and Christianity are of natural growth. If you look through the history of the Christian church, you will see that

Christian theology often had a great tendency to develop itself in a wrong direction. I ask you whether the Christianity of the New Testament is not of a very different kind, and of a much higher development, than the Christianity of the middle ages ; and whether out of the pure monotheism of the Bible there has not been a tendency to develop into polytheism ? I do not deny that religions sometimes exhibit a tendency to grow upwards, but as a general rule their tendency is downwards ; and certainly a more rational mode of constructing a history of religion in prehistoric times would be to argue from the known to the unknown, and not from the unknown to the known. (Cheers.) It gives us a fine opportunity for speculation when we get into the unknown and the intangible, but I prefer the known, and my process of reasoning would be to take the reverse course from that pursued by Sir John Lubbock. I do not think there is any fairness in assuming that religion began in its lowest form and gradually advanced to higher forms in prehistoric times ; and it seems to me to involve several very serious assumptions before you can arrive at any such conclusion. Sir John Lubbock has much to say about witchcraft and ghosts, and so forth ; but I believe that in the most civilized countries you could pick up many other similar matters, and arrange them in a similar manner. It is remarkable that a vast amount of superstition prevails in every country. There is also a great deal about charms and things of that kind in Sir John Lubbock's book ; but we all know that a belief in such obtains even in our own day. We have heard of witches, and magic spells, and "charms." These things exist in most countries, and from such you could construct a theory quite as good as Sir John Lubbock has constructed as to the beliefs of uncivilized man. (Cheers.)

Rev. G. PERCY BADGER.—I should like to say one word on this subject. How Sir John Lubbock or any one can know what the religion of prehistoric times was, I am at a perfect loss to conceive. Such monumental evidence as we have of the earliest times, is rather in favour of the religion of that period being monotheistic than in favour of its being polytheistic. Take, for example, Tsabaism:—and to show how people, and often very learned people, make great mistakes in trying to get acquainted with the religion of foreign countries, I may mention that the Greeks said that the Arabs had two gods, one of whom was called Orotalt, and the other Alilat, and they made out the latter to be Venus. Now, "Orotalt" is undoubtedly a corruption of the Arabic *Allah-Ta'alah*, the Most High God, a title then, as now, given by the Arabs to the one only true God. Everybody knows that the Tsabians believed in one all-powerful God, to whom they devoted themselves, though they believed in inferior deities who dwelt in the fixed stars and planets. There is no question that Tsabaism originally was a pure monotheism. Mr. Row has spoken of Sir John Lubbock's assumptions. Now, I wonder why on earth Sir John Lubbock, or any one else who quotes Hesiod and Homer, objects to quote the Bible. (Cheers.) Is not Moses as good an authority as either of these pagan writers ? Herodotus, for instance, wrote a

great deal of stupid nonsense ; yet we say we can put away all the nonsense, and sift the chaff from the wheat. For instance, he says on one occasion, that he had heard from the priests of Egypt that the waters of the Nile came from melting snow in regions farther south ; but how, he argued, could there be snow in a region where the sun was so hot that the people were blackened by it ? (Laughter.) He also says that the fish in the Nile were flat-ribbed on one side of the body, because as the stream took them down they rubbed against the banks, and when they came back they rubbed themselves on the same side on the opposite bank ! As sure as you quote a heathen author of antiquity, we must fall down and worship him ; but when you quote the writers of the Bible, it is thought that we had better not listen to them at all. Now I, for one, cannot see why we should not believe the cosmogony of the Bible as well as that of any heathen author, especially when we examine the cosmogonies of the latter. One thing that proves the inspiration of the Bible to me is, that in all other cosmogonies the greatest folly and nonsense is talked ; but in the Bible I find it sublimely stated that in the beginning God created all things. Now, where did Moses get that from ? (Cheers.)

Mr. Row.—I ought to have mentioned, before I sat down, that there has also been a tendency to development in the wrong direction in Mahomedanism. You have a system of pure theism in the Koran, but a sect of Mahomedans have sprung up in whose belief saint-worship holds an important place. Sir John Lubbock, to have proved anything at all, should have proved that his divisions correspond with the developments and enlargements of the human intellect, but he has not attempted that at all.

Rev. T. M. GORMAN.—I think the paper furnishes a striking corroboration of the truth, that Divine Revelation is the primal source of a belief in One Supreme Being. The author has indicated a source of evidence from which it may be abundantly proved that the higher we ascend in the history of nations, the more clearly the idea of One God is seen to lie at the root of their various beliefs and modes of worship. I would, however, take the liberty of observing, that the form of the argument employed does not appear to do full justice to the principles of the Christian religion, so far as they are connected with the subject. Admitting that it may be valid and useful as far as it goes, it cannot, I think, be pronounced conclusive. We shall find, if I mistake not, that in the last analysis, the fact of prehistoric monotheism (to use the language of the day) can be reasonably and permanently established only by the aid of a true Christian theology. To carry on investigations on such transcendental subjects as the *origin* of civilization without the light of Divine Revelation, is an impossibility. Attempts of a similar kind have been made, of late years, to give an account of the *origin* of species, and to determine "Man's *place* in Nature" by methods and processes purely scientific. When carefully scrutinized, as to their principles and results, these Essays explain nothing. They may be briefly characterized as new versions of the Oriental story of the elephant resting on the tortoise,

skilfully adapted to the notions of Western nature-worshippers. The thorough investigation and analysis of such problems is a work to which the mere "light of nature" is unequal. The monotheism of the Bible, rightly understood according to the general sense of the Bible itself, will, I believe, be found in perfect harmony with the needs of human reason in the highest state of culture. In the absence of anything that can be fairly called a reason, we must refuse to surrender this position to those who differ from us. We cannot accept as arguments chance conjectures based chiefly on a purely arbitrary arrangement of certain facts, and made, apparently, in the interest of a foregone conclusion. If the whole question be made to turn upon the nature and character of belief in the Deity, then the argument of such writers as Sir John Lubbock may be moved entirely round to an opposite point. The very denial of the Supernatural and the Divine on the part of some who have been brought up and continue to live in the midst of its light, furnishes of itself a most cogent proof of the necessity of an original Revelation to man. It shows that man, in his natural state, could never arrive at a knowledge of truths pertaining to the spiritual order. It is not difficult to imagine a votary of natural science, here in London, surrounded with adverse influences of various kinds, allowing himself gradually to slide so far down the now dangerously steep incline of modern unbelief, as to arrive at last at that point where God and nature are regarded as practically identical, and in this state of worse than heathen darkness proceeding to construct fanciful hypotheses concerning the origin of civilization. Such a phenomenon, indeed, strikingly illustrates the Christian dogma of the fall of man, but sheds not a ray of light on his true origin. One extract given in this paper sufficiently indicates the stage at which sceptical speculation has arrived :—

"Hitherto it has been usual to classify religions according to the nature of the object worshipped ; Fetichism, for instance, being the worship of inanimate objects ; Sabæism that of the heavenly bodies. The true test, however, seems to me to be the estimate in which the Deity is held."

It is not a little curious to find such statements confidently made as if they were so many indisputable facts. Before blindly accepting them, one is at liberty to ask, "When did such a mode of classification become generally received among thinking men ?" With whom did it originate ? On what principle does it rest ? Let us take this alleged "true test" of the comparative value of religions. If, by an "estimate" of the Deity, be meant the character of the *idea* we have of Him, then the Christian religion fairly tried by this test, rises so far superior to all other religions, as to evince its own original heavenly origin. Its cardinal doctrine, in relation to the present subject, is sufficiently explicit. It is this. There is one God who has vouchsafed to reveal Himself, from the beginning to His creatures. He is fully revealed in the Christian Scriptures in a veritable human form, so that all may know and worship Him. This idea, when once fairly grasped, suggests to the unbiassed and instructed mind stupendous conceptions of Deity and of Creation. For the Christian, the question of the *origin of civilization* is substantially the

question of the *origin of man*, stated in other words. It is clear, then that reasoning which is either implicitly or explicitly non-Christian can be of no use in this matter. With respect to the real point in dispute, there is no common ground. This ought to be frankly admitted on both sides. The Christian who knows what he believes, does not fear to make this admission. The Bible, in the simplest and clearest terms, declares that "*God created the heaven and the earth,*" and that upon this earth "*He created man in His image,*" and that He "*breathed into his nostrils the breath of life.*" These plain, direct, affirmative declarations must, I venture to submit, form the basis of all reasonable speculation concerning the origin of civilization. Man, thus created in God's image, may be considered to be the true origin of the *Civitas Dei*, whether on earth or in heaven. Until some sort of agreement be come to, with respect to these elementary principles, it seems utterly useless to engage in totally incongruous processes of reasoning on this subject. I wish to observe, however, that in what has been advanced by such writers as Sir John Lubbock, Mr. Darwin, and Professor Huxley, a clear and marked distinction ought to be taken between genuine facts of science and conjectures as to the true meaning of these facts. It should ever be borne in mind that truths of a philosophical kind belong to a sphere which is above that of mere science. In truth, the problem of the origin of civilization is one of those which, in some of its relations, transcends both science and philosophy. Students of physical science, in the present day, need to be reminded that the respective domains of science, philosophy, and theology are totally distinct, though intimately connected. The man of science, as such, is not competent to decide on questions which lie beyond the ambit of his peculiar studies. Even the philosopher, as such, cannot legitimately pronounce an opinion on matters which pertain to the sphere of spiritual and divine truth, or theology proper. Until the boundaries of these altogether distinct domains of thought are marked out with rigorous precision, and the principles peculiar to each duly subordinated, speculations on such subjects as that discussed this evening cannot but result in hopeless confusion of ideas and mere empty terms. In each of these fields of human inquiry, first principles must be clearly predetermined. Meantime, in the light of Christian philosophy we are able to say to those who differ from us, "*Ye worship ye know not what: we know what we worship.*" An unknown God is practically equivalent to no God. I wish to add, in conclusion, that this privileged position of the Christian philosopher in no way conflicts with another definite doctrine of revealed religion, namely, that all sincere and humble worship—embracing whatever may be included in Sir John Lubbock's "*six stages*"—is accepted, in ways unknown to men, by Him who sees the heart. Thus all non-Christian forms of worship, according to the light vouchsafed, comes at last to be, in reality, a worship, in fact, of the one living and true God, who is the sole and only origin of *civilization*, because He is the Creator of the first man, in His own image, and the continual inspirer and preserver of all that is good and true in

humanity. This view appears to me to contain the elements and basis of a truly rational monotheism. This is, I believe, the monotheism of the Bible, and furnishes, I venture to think, the true test by which to try the real value of any "estimate in which the Deity is held," especially in certain modern scientific speculations, which too often present, at least, the appearance of conscious and determined hostility to the very foundations of divinely-revealed truth.

Mr. A. V. NEWTON.—Are we to understand the last speaker to say that monotheism had its origin in the Bible, and was not known before?

Mr. GORMAN.—This question introduces a new element into the subject before the meeting, and one which it would be impossible for me now to discuss. Suffice it to say, that from the Bible itself it may be shown that the Word, or a Divine Revelation, existed among men before the Scriptures written by Moses, which we now possess. The law as given on Mount Sinai was the commencement of the Word, as we now have it. When I speak of THE WORD, I mean Divine Truth, as distinct from the clothing of the peculiar language in which it has been handed down to these times, and adapted to the capacity of man, specifically, to that of the Israelitish people. There once existed among men a Paradise state, a golden age, of which mankind is at this day, in general, profoundly ignorant.

Mr. NEWTON.—Do not the fire-worshippers or the Parsees claim a much higher origin than any of the other idolaters?

Mr. GORMAN.—The worship of the Parsees, even in its most enlightened forms, is nothing but a remnant of the primeval revelation, more or less corrupted and perverted into an idolatrous worship.

Mr. TITCOMB.—After having listened to the debate that has been raised upon my paper, I can only express my regret that Sir John Lubbock had not some advocate present to have shown fight on behalf of the system which he has taken up. There are two objections which have been advanced against the paper; but both are very mild. The Rev. Mr. Badger did not mean to attack me, but what he said was, in a certain sense, a sort of criticism upon my paper, when he found fault, or expressed astonishment, because no argument had been drawn from Scripture. He seemed rather to put it to me why, as a clergyman, I should not stand upon the platform of Scripture.

Mr. BADGER.—Excuse me. I should have done the same as you have done; what I said was about your opponents.

Mr. TITCOMB.—But I should like to explain why it was that I did not go upon the platform of Scripture. Supposing a Roman Catholic wanted to confirm the truth of the tradition that St. Peter lived as Bishop of Rome for five-and-twenty years, would it be of any use to quote that tradition as a proof? It is obviously absurd, and therefore a sort of thing to be avoided. If anything is urged against the Bible, it is of no use to appeal to the Bible to prove the contrary. The only thing for the clergy to do is to meet these people on their own ground. The other point, brought forward rather smartly by Mr. Row and Dr. Fraser, against my paper, was that I had constructed it on a sort of misnomer, because where there is no history there can be nothing historic.

Mr. Row.—I did not mean you ; I referred to Sir John Lubbock.

Mr. TITCOMB.—Very well, but I will just read again a short passage from the 10th paragraph of my paper :—

“The entire discussion consists in our fairly grappling with those loose and disjointed evidences which crop up here and there, either among those savage nations which have no history at all, or else among those anciently civilized nations which flourished before authentic history begins.”

My idea is, that as these men try to show the prehistoric times of savages, so we must try to show the prehistoric times of monotheism. My title, therefore, is the counterpart of theirs ; my object being to show that among those nations where history is wanting, there are glimpses in our range of view which throw us back into the past gulf, and give us ground for supposing that monotheism then prevailed. We believe, for instance, that Egypt flourished before authentic history began ; indeed Manetho gives us a history of events before the 18th dynasty, at a time coeval with Moses. But there is nothing authentic, or very little that is authentic, before the time of Rameses the Great. The monuments of Egypt, however, go back much farther, and we get much that is prehistoric from the drawings or sculptures upon them. These representations are not historic in the proper sense of the word ; they give us glimpses of the prehistoric. Anything that alludes to something past—anything, in fact, which gives the first point of contact with history, and which contains a shadow of reflection on previous history, would be prehistoric in my view ; and it is from such glimpses of the past that I have endeavoured to make out my case. I only hope that this line of thought will fructify, and that we shall be more and more confirmed in the truth ourselves, and better able to confirm it in the minds of those who are waverers and doubters. (Cheers.)

The Meeting was then adjourned.

ORDINARY MEETING, MARCH 6, 1871.

JAMES REDDIE,* ESQ., HONORARY SECRETARY, IN THE CHAIR.

The Minutes of the last Meeting were read and confirmed, and the following elections were announced :—

MEMBERS :—William Day, Esq. (Life), Westwood Park, Forest Hill ; Charles Lloyd, Esq., Merton Lodge, Chiswick ; James Jardine, Esq., M.A., LL.D., 1, Whitehall Gardens ; Rev. George Warburton Weldon, M.A., Vicar of St. Saviour's, Chelsea.

ASSOCIATE :—Rev. Robert Nicholl, M.A., The Chantry, Norton, near Sheffield.

Also the presentation to the Library of the following works :—

| | |
|--|------------------------------|
| 'Ancient Pillar Stones.' | <i>From Dr. E. Haughton.</i> |
| "Remains of Roman Baths in England." | <i>Ditto.</i> |
| "Molecular Archetypes of Organic Forms." | By the Rev. J. G. MacVicar, |
| D.D., LL.D. | <i>From the Author.</i> |

The Chairman, in the absence of the author, then read the following paper :—

ON BIBLICAL PNEUMATOLOGY AND PSYCHOLOGY.

By the Rev. W. W. ENGLISH, M.A.

1. **T**HERE is an obvious connection between the philosophy of human nature and the professed objects of Revelation, and the enlightened Christian would expect to find agreement between them ; he would expect to find in Holy Scripture a correct statement of psychological and ethical facts. But why discourse on the spiritual part of man's nature should so generally be called psychology rather than pneumatology is not apparent, unless indeed it be assumed that Pneuma and Psyche are different names for one and the same thing, the point I shall feel it necessary in this paper to controvert. Sir W. Hamilton thought no competent objection could be made to the general adoption of the term psychology, while

* The late.

it affords, what the various clumsy periphrases do not, a convenient adjective. This may be so, but truth must not be sacrificed for the sake of convenience. Taking the New Testament as a text-book in regard to the science of Pneumatology and Psychology, I find that Spirit, the immortal part, whether as referring to God, to man, or to demons, is there *Pneuma*, never *Psyche*. Discourse, therefore, on man's spiritual part, strictly speaking, should be called Pneumatology.

2. Delitzsch supposes the soul to be the outward expression of spirit: the view is Platonic, but not Biblical, and it is to this confusion of thought that we owe the confusion of terms in common use. But Holy Scripture distinguishes between spirit, and soul, and body, and I venture to think it has a *consistency and philosophical accuracy* in its use of terms that we fail to meet with elsewhere.

3. The Old Testament stands, however, upon a different footing to the New. It was composed by men unknown to each other, and living at different and widely separated periods of the Church's history. They were in a sense compelled to use the language of their times. And, moreover, we find in their writings an obvious *adaptation* of language to the *wants* of the age in which they lived. I will here give an illustration of this from the different names applied to God. In the Pentateuch, in Joshua and Judges, we never meet with the title "the Lord of Hosts," but in the books of Samuel, Chronicles, and throughout the rest of the books of the Old Testament, it occurs frequently. Here we find in the introduction of a new title the *adaptation* of Church teaching to the wants of the age. When the "hosts of heaven" came to be worshipped, the Church of that age rebuked the idolatry by connecting God's name with that which was worshipped. And were it not that I should be digressing, I might here point out that those who assume that the title Jehovah belongs to the times of Samuel, and that therefore the Pentateuch which contains that title is not older than the times of Samuel, would do well to set themselves to work and explain how, upon their own principles of criticism, it comes to pass that the book of Samuel contains the name "Lord of Hosts" not less than seven times, while the Pentateuch, which has been fathered upon his times, is wholly silent as to the existence of such a title. But I proceed. This *adaptation* of terminology in the Old Testament, of which I am speaking, bends itself in another direction. Natural religion was anterior to that which is revealed, and it is of wider extension; it belongs to the world, while revelation is peculiar to the Church. But just as the Church came in contact with what remained that was good of the world's

religion, she took up, as wisdom itself would have directed, the terms of that remnant, and made them her own. Thus another name "the Most High God," which embodied the simple, original, primeval thought of man as he looked above him and saw one far off, was incorporated into sacred phraseology. Melchisedek, the Priest of the older religion, was "Priest of the Most High God." The earlier Canaanites were of course familiar with this title, and hence as they came upon the scene it re-appears. And so throughout the Old Testament we find variety and *adaptation* in the use of terms. There is unity of thought and sentiment, but with this a conformity with historical law and usage in the employment of terms.

4. The New Testament writers were differently situated; they belonged to the same generation, were personally known to each other, and they had most of them been with that great inspiring Master who promised to guide them into all truth. Baptized into one body, they were inspired by one feeling and sentiment, and spoke the same thoughts, in a wonderfully strict and philosophical language.

5. But before entering upon a particular analysis of New Testament language, I would observe that *mind* is not strictly synonymous with *spirit*. The attributes usually ascribed to mind connect it very closely with our bodily organization. Most writers, as Morell, and the Germans, as Beneke, adopt a triple division when speaking of the attributes of mind. Sir W. Hamilton arranged the phenomena of mind under the three heads of knowledge or cognition, feeling, and conation or desire and will. The intellect has been regarded as the *thinking* portion of mind, including memory, abstraction, reason, judgment, &c., as modes or varieties of intellect. The sensitivity has been regarded as the *feeling* portion of mind, including all such modes or affections as arise from external action and internal reflection. And the will has been called the *moving* portion of mind, the faculty of spontaneous power. Almost all writers have included, in modern times, thought, feeling, and will, in their classifications of mental phenomena. But it is obvious that in all this there is cross division. Body, soul, and spirit are included in these phenomena. And I wish to mark that spirit, strictly speaking, is not synonymous with mind as thus understood, and that what is called psychology, but ought rather to be termed pneumatology, despite Sir W. Hamilton's difficulty about finding a "convenient" adjective, should be kept clear of these modern classifications of the mind's powers and affections. Spirit, soul, and body, in the New Testament, are prime factors in human nature.

Mind, on the contrary, is a complex term, in common usage, involving a complex notion.

6. Biblical Pneumatology and Psychology are with us faulty, partly on account of our deficiency of terms accurately to represent the facts which lie at the foundation of these sciences. To translate the thoughts of inspired Scripture accurately requires a fuller and nicer terminology than we possess. "Sensual, (psychical) having not the spirit," is a difficult sentence to grasp in thought. Yet to improve the translation by substituting another word for sensual would seem to involve the necessity of inventing one. The term "natural" would agree with the rendering elsewhere, but it would still fail to bring out the real psychological idea involved in the sacred text.

7. Nevertheless thought endures while words change and language varies, and the idea of a triple division in man's nature has been retained since creation. Alike in the writings of Moses, of Homer, of Plato, of Aristotle, of Josephus, and of the New Testament, we find a similar trichotomy. There is necessarily a considerable variation in the expression of the underlying thought even in the Old Testament, and for reasons already given, but the variation is the inevitable consequence of historical law and usage. The earlier and later writers were separated by whole centuries, and nothing but the most rigid mechanical verbal inspiration could have saved them from variation of expression. They agree in fundamental thought, but follow, necessarily, to be understood by men of their own generation, the law of change which affects all language. "Nephesh" soul, is not uniformly employed in the same sense, but the soul is not therefore confounded with either the spirit or the body of man. "Nephesh" means in the earlier books a bodily organism, a living frame; sometimes, as in Numbers, a dead corpse; but in the Psalms it is applied rather to the living animal principle. It is never, like "neshama" and "ruach," applied to God, who is pure Spirit. "The Lord God formed man of the dust of the ground (his body) and breathed into his nostrils the breath of life (spirit), and man became a living soul;" that is, having Psyche, a bodily frame with life in it. (Gen. ii. 7.)

8. In the New Testament S. Paul speaks of "your whole spirit (Pneuma), and soul (Psyche), and body." This tripartite division corresponds with that of Moses, and it is referred to by writers, profane as well as sacred, from earliest times: the notion being primeval, it has been handed down, more or less clearly, by tradition, inspired and uninspired. I say tradition, because Holy Scripture itself is but the handing

down through different dialects and languages of those original thoughts which we believe to have been communicated by God ; it is therefore, itself, but one form of tradition, the safest because written. The case of Jannes and Jambres, who withstood Moses, was handed down in some fashion till it found its way into the Jewish targums ; and the twenty or more accounts of the Deluge have all come down from one original true story. Even so Plato and Aristotle and Josephus have all the primeval thought of man's tripartite nature interwoven with their writings. Plato makes Timæus, the Pythagorean, in his long and learned discourse on the origin of the universe and the formation of man, to speak of intellect in soul, and of soul in body ; the soul being made to occupy an intermediate position between the perishable body and the immortal principle of intelligence. The body is represented as the vehicle of the soul, the soul as holding the immortal principle. Thus the soul is represented in three lights, in regard to its own nature, and in regard to its operations upon the spirit and body. In itself it was considered mortal or immortal according as it was viewed in its connection with the sensuous body or the intellectual faculties. The Gods, fearing to defile the Divine nature more than was necessary, lodged the immortal principle in the head, and separated it from the perishable body by the neck, as a sort of isthmus coming between. And Delitzsch has simply adopted in outline this Platonic view of the soul and made it the basis of his "Biblical" (?) Psychology. Aristotle separated the powers of the soul into two parts, the rational and the irrational—the rational part having to do with abstract and practical truths, the irrational part comprising the bodily appetites and passions. And Josephus also has the same primeval thought. He says "God took dust from the ground and formed man, and inserted in him a spirit and a soul." And in speaking of the Jewish festivals and purifications, "Moses forbade the use of blood for food, and esteemed it to contain the soul and spirit." Thus from Creation, with more or less accuracy, this idea of man's tripartite nature seems to have been handed down. S. Paul did but utter a truth universally received and believed, though necessarily expressed with varying accuracy, when he spoke of "your whole spirit, and soul, and body."

9. But it is time to come to a more particular analysis of New Testament language, which I believe to be consistent throughout, and to exhibit a philosophical accuracy that we fail to meet with elsewhere.

10. Spirit (Pneuma) occurs about three hundred and fifty

times in the New Testament. In each case it is applied, in a literal or figurative sense, to the highest powers of being, the immortal part of nature. In about two hundred and thirty instances the reference is to the person and work of the Spirit of God the Father, the Spirit of Christ, and the Holy Spirit. About sixty instances are references to the spirit of man, in a few cases in its disembodied condition. Some forty passages refer to created intelligences, as devils, unclean or evil spirits, spirits not said to be either good or bad, and angels. And the rest are figurative uses of Pneuma, either in opposition to the flesh, the letter of the law, or the world—or else under such forms of speech as the “spirit of holiness,” the “spirit of meekness,” the “spirit of promise,” the “spirit of wisdom,” and the “spirit of adoption.” The application of Pneuma to the highest powers of man’s being is also forcibly shown in the use of the adjective and adverb. The gifts of God, the Great Spirit, are “spiritual” gifts. The things of the Spirit are “spiritually” discerned—spirit working in and through spirit. The creature holds communion with the Creator through or by means of the “spiritual” part of created nature. Thus it is that in one passage the “spiritually” minded man (πνεύματικὸς) is opposed to the “natural” man (ψυχικὸς), and in another to the “carnal” man (σαρκικὸς).

11. Soul (Psyche) occurs about one hundred times in the New Testament, and is almost as often translated “life” as “soul.” There are no passages where “life” would not be the correct rendering, for it uniformly implies life as combining soul and body; it never refers to life, or pure spirit, in the intermediate state. In the Old Testament loss of life is called the “pouring out of the soul.” (Is. liii. 12; Job xi. 20; xxxi. 39, &c.) In the New Testament the idea of mortality is often associated with soul because of this implied combination of soul and body,—a combination, that is, which is liable to cease. To gain the whole world is put against the loss of the soul,—its death, figuratively speaking, in the eternal world. We are to fear Him who has power to destroy both soul and body in hell—ἐν γέεννῃ—the place allotted to the wicked after the resurrection—not in Hades, where the spirit, Pneuma, goes in its disembodied state. It is temporal gain and eternal destruction or loss of divine favour that are placed against each other. Matt. x. 39, and parallel passages refer to life *here* and life *after the resurrection*, passing over the intermediate state, which is peopled with “spirits,” not “souls” or lives. The eight souls saved in the ark became “spirits” in Hades, and our Lord went in “spirit” (not in life or soul) to preach to the “spirits in prison.” Matt. x. 38, 39, com-

pared with Luke xii. 4, 5, shows that it is life in the *resurrection* state that is there spoken of, for it is life not in Hades, but in Gehenna. The participles used also indicate this prolepsis. The words "kill the body and are not able to kill the soul." (Psyche), might seem at first sight to favour the view that soul survives the body, and lives independently of it; but a little consideration will show this not to be the sense. For the same Teacher cannot mean in one passage that Psyche survives the body, and in another that Psyche may be lost even in this life. He means that Psyche is to be understood of life in two senses and under two conditions, the one of a temporal, the other of an eternal kind.

12. There are half a dozen or more passages that might seem not to square with the view that Soul or Psyche never means spirit in the intermediate state, and were it not that I should have to trespass too far upon pure exegesis I should be glad here to examine them. But I must content myself with simply pointing to one or two.

13. Acts ii. 27—31 is a *quotation* from the Septuagint, and must be understood in the light of Old Testament usage. There Nephesh means sometimes a bodily organism, sometimes the living animal principle, and sometimes a dead corpse. But it is *never* applied, I think, to pure spirit, as the Spirit of God, like Neshama and Ruach.

14. Delitzsch quotes two passages to show that Psyche is sometimes referred to as in the intermediate state (Rev. vi. 9, and xx. 4); but the former passage is symbolic, calling up the altar and its victim, or life in *this present* condition, while the latter speaks in plain terms of life in the "first *resurrection*." Neither passage gives the smallest colour to the view that Psyche is used in the sense of Delitzsch. He says, "The soul and spirit outlast the corruption of the body. And nevertheless it is true of the soul, in a certain sense, that it dies. It dies so far as it went to centralize itself in the natural powers of the body, and to pervade the organs of the body with its own spirit-like life. It does not die so far as it is of the spirit; but it dies so far as it becomes part of the body." This view, as I have already said, is Platonic; it is exactly that which I have given from the writings of Plato. But is it "Biblical"? Delitzsch seems to me to crown a work of labour on "Psychology" by denying the existence of "Psyche"! His trichotomy becomes under the pressure of theory dichotomy. The soul is neither itself, nor body, nor spirit! It dies, and it does not die! I do not think that the New Testament trumpet gives this uncertain sound.

15. The Word of God, as quick and powerful, would not

find the same powerful figure where it is said to "pierce" even to the "dividing asunder of soul and spirit" (Heb. iv. 12) if the soul and spirit were one in fact.

16. Man's threefold nature was well and truly described by Luther when he compared it to the tabernacle which Moses made. The *sanctum sanctorum* within which God dwelt, without the natural light of the sun, may illustrate the spirit of man, in which God dwells in dim faith without sight. The *sanctum* with its candlestick, lamps, and pipes, may illustrate the soul with its many avenues of light, the senses. And the *atrium* in the open sky and broad daylight, may illustrate the body, whose actions are open and manifest to all.

17. But the *relations* which the spirit, soul, and body bear to each other are by far the most difficult parts of my subject to adjust. It is here that the real difficulty begins. I think the language of the New Testament is plain and precise, but it gives us less help when we come to consider man, not simply as having spirit, soul, and body, but as having parts which must of necessity bear a certain *relation* to each other. If they can be conceived, in the abstract, as separate entities, they must of necessity stand also in some conceivable relation. What are spirit and soul? And in what relation do they stand to each other and to the body?

18. The spirit (Pneuma) comprises the directing, self-conscious principle, the *ego*, that which constitutes man's real personality. "The flesh lusting against the spirit, and the spirit against the flesh," is the Pneuma in its renewed state, struggling with old habits of the body, become so powerful as to be almost a law unto themselves. Will and thought are modes of spirit life. Nous is not, in the New Testament, as in uninspired writers, identical with Pneuma. In one of the creeds preserved by Epiphanius in his *Ancorate*, written A.D. 373 (*Epiph. Ancorat.*, cc. 119, 120), the clause which speaks of our Lord coming down from heaven and taking flesh, marks the perfection of His human nature by adding *ψυχὴν καὶ σῶμα καὶ νοῦν*; but in the New Testament, Nous is regarded rather as a modification of Pneuma than as identical with it; hence "the mind, or nous, of the spirit." Nous is the principal characteristic of Pneuma. In the Apocalypse, the unravelling of enigma is the work assigned to Nous. "Here is wisdom, let him that hath nous, count the number of the beast." Again, "here is the mind or nous that hath wisdom." Compare Rev. xiii. 8, Rom. i. 20, with Heb. xi. 3. Pneuma, therefore, comprises not only will and self-consciousness, but discernment, reason, and I may add also speech (*logos*); for spirit and speech have a natural connection as substance and shadow.

Language is not of necessity articulate, but it is always the vehicle of thought, never of feeling. It belongs therefore to Pneuma, not to Psyche. It has its origin in Pneuma, though in the concrete or articulate form, of course, it is the result of man's threefold nature.

19. Without being able, therefore, to solve the problem what spirit is in itself or in regard to its essence, we can yet see a long way into its nature by connecting those powers or faculties which are ascribed to it in the sacred volume.

20. The soul (Psyche), as the vital ethical capacity in man's moral nature, has of necessity a closer affinity with the affections of the perishable body than with Pneuma. This follows, I think, from the necessity of the case. And here again the New Testament coincides with this thought. I have no wish to disturb the calmness of any who think that "reason" is the basis of religion and morality, but I must say that such a view is wholly alien to Sacred Scripture, and I think incompatible with sound philosophy. Psyche is the vital ethical capacity in man, and its tenderest thoughts, its highest and holiest aspirations, are not seldom trodden underfoot by the dominance of that Pneuma which even devils have. I do not here say that Pneuma has nothing to do with religion and morality, any more than I say that it has nothing to do with the constitution of the human conscience; it has its part to fill in the constitution of the human conscience, and also in religion and morality, but it is not, I venture to think, upon distinct grounds, the ground of Holy Scripture, the *basis* of either. In this view I agree, so far as ethics are concerned, with Sir James Mackintosh in my conclusion, but I arrive at it from another and a different point of view. The basis of religion as well as of morality is to be found in man's *psychical* rather than *pneumatical* nature, a principle well worth further development and illustration than I can here afford to give it; for it seems to me that reason and rationalism have well-nigh gone mad in these our times. Intellect has its proper sphere, but it cannot take the place of the soul without stripping morality and religion of all that is holy and tender and good. The Pneuma is a foundation, I venture to think, quite incapable of bearing the kind of superstructure which we mean when we speak of what is holy and just and good. Aristotle did not put his *ἐπιστημονικὸν* that which has to do with abstract principles, *νοῦς*, or deductions from principles, *ἐπιστήμη*, in the place of those powers of the soul that direct us to what is religious and moral. Neither does inspired Scripture, which refers us, in religious matters, to the seat of the affections. "Thou shalt love the Lord thy God with all thy soul." "In

patience possess ye your *souls*." "My *soul* doth magnify the Lord." "Fear came upon every *soul*." "Do it heartily as unto the Lord," literally as from the *soul*. "Would have imparted unto you not only the Gospel, but our own *souls* also, because ye were dear unto us."

21. The Greek myth rightly personified the soul in the female form of Psyche, for the relation which the soul bears to the spirit is not unlike that which the woman bears to the man. I have no wish here to break a lance with Mr. Mill, but I may observe that I could never arrive at the conclusion, from pneumatical and psychical principles, that the sexes were equal. At creation the *ἐμπνευσις* or breathing upon Adam was not repeated in the case of Eve; hence S. Paul says, "A man ought not to cover his head, forasmuch as he is the image and glory of God; but the woman is the glory of the man. For the man is not of the woman, but the woman of the man. Neither was the man created for the woman, but the woman for the man." (Gen. ii. 21, 22, and 1 Cor. xi. 7—9.) There was a creatively-established dependence in the woman, and there was a creatively-established spiritual superiority in the man. Into man's nostrils God breathed the Divine breath of intelligence. But the woman had her beginning in the man. From the first she had a subordinate position, and was different in constitution of her nature. "*Naturæ humanæ vir est intellectus, qui a Græcis vocatur νοῦς, mulier sensus, qui foeminino genere αἰσθησις exprimitur*" (Scotus.) In man the intellect or pneumatical part is stronger, being derived directly from God; in woman the sensitivity or psychical part is stronger, as her very origin, in Adam's psychical part, was designed to show. The tempter knew this fact, to which every day's experience also testifies; he knew that Eve's psychical nature would be more easily swayed by passion and appetite than Adam's pneumatical nature, and he tempted her. Delitzsch has a passage on this point which so exactly expresses my thoughts that I must quote his words: he says, "Man and woman are distinguished as are spirit and soul, by self-conscious energy on the one hand, and resigned passivity on the other. . . . The woman is the man inverted; in her preponderates the principle negatively active, turned from without inwards, from the circumference to the centre, living itself forth, in adopting and receiving, which corresponds to the *Nephesh*, i.e., the soul." All history testifies to a difference in the sexes, revelation utters the same voice, and the genius of grammar answers to this distinction which both history and revelation combine to establish. How is it that in an age of intellectual or pneumatical pride like this, when

some nations, as France, have largely cast off God and religion,—how is it, I ask that such nations yet retain a fair proportion of *female* worshippers? This fact is to be explained by the difference I have been insisting upon. Women, from the very constitution of their nature, are more pious, more religious, than men; they are less tempted to fall away through pneumatical pride, and more disposed to acts of devotion, which have their mainspring in the psychical part of nature.

22. I forbear to enter here upon the relation of Psyche to the blood, though it is written: "Flesh with the life or soul thereof, which is the blood thereof, ye shall not eat." (Gen. ix. 4, 5.) It appears to have pleased God to give to the soul a very close and a very peculiar relation to the blood; indeed this thought is by no means confined to sacred Scripture.

Purpuream vomit ille animam, et cum sanguine mista
Vina refert moriens.

23. Passing over the question of the relation of Psyche to the blood, I would point out, that what I have said in regard to the difference between Pneuma and Psyche is very similar to that which Professor Stokes, in his address before the British Association, guided by considerations wholly independent of the Bible, hinted at. He said: "While admitting that the organic substance of which plant or animal is composed was built up by the laws of chemical affinity, he still thought that these laws were far from giving any adequate account of life. (Psyche?) Behind and above these laws, working mysteriously through them, lies another force, whose mysteries are still impenetrable; and beyond the phenomena of *life* (Psyche?) itself, lie those of *mind* (Pneuma?) transcending the former as much as those of life transcend chemistry," &c.

24. To speak generally, then, I would say, that the *relation* which spirit, soul, and body in man bear to each other is a relation that is incidental to the present condition of things. As the hand presents the food for the mouth, and the mouth gives sustenance to the body, so the body brings the spirit into immediate contact with this terrene state of things, that it may exercise itself upon the world's wonders, while the soul's softening energies were intended to consecrate all with feelings of justice, holiness, and love. The spirit's powers and capacities have their sphere in the wide fields of abstraction and generalization, the soul's in the enjoyments which life and religion give, and the body's in such things as perish in the using. Take away the present condition of things, and the relation which spirit, soul, and body bear to each other would cease. Hence there is nothing of a foolish philosophy

in believing in the spirit's separate existence. We may conceive of the relations between spirit, soul, and body being greatly altered in the eternal world. Delitzsch views the soul simply as a connecting medium between spirit and body; but this is a very imperfect view of the relation. It has far more than this. It supplies man with an *ethical basis*, a religious nature. Moral probation is possible on earth because man has a human soul.

25. The inspired Scriptures, I think, explain nothing as to the manner of union between spirit, soul, and body. These parts of man's nature are mentioned, like the different persons in the sacred Trinity, but there is left as much mystery as to the precise nature of the union of these parts in our manhood as there is in regard to the nature of that union which subsists between the three persons in the Godhead. Yet there are many inferences to be drawn from the pneumatology and psychology of the New Testament which go far to settle many deep and interesting questions that have troubled this and past ages,—questions which do not, and never did, take their rise in any difference of Scripture interpretation; they are questions which originate purely in philosophy, the philosophy of human nature, and are imported from what is subjective into what is objective, from the thinking feeling person into the written Word of God. I will close with a few hints as to what I mean, showing how very many and important are the questions that lie for settlement at the foundation of a correct pneumatology and psychology.

26. Take first the question of the *relation of religion to superstition and infidelity*. It is no mere affair of Scripture interpretation. Men range themselves on the one side and on the other quite independently of any settled views of Holy Scripture. The principles which guide them are from within; they are either pneumatological or psychological; but seldom, if ever, Biblical. The tendency of this age, in a large number of educated men, is to infidelity (I use the term in no offensive sense; I mean by it simply unbelief in regard to the fundamentals of the Christian religion), and this unbelief is openly proclaimed in respectable daily papers; but no person would ever think of accusing the writers of these papers of a knowledge of Holy Scripture. Their principles are drawn wholly from within, from a subjective source; they are pneumatological in an exaggerated degree, the humanizing elements of psychology being not simply misnamed, but displaced or left out in their exercises of thought. The *exclusive* study of physical science has a deadening tendency so far as morality and religion are concerned. The *nous* is strengthened by in-

tellectual exercise, but the soul is dried up for lack of proper food. On the other hand, the tendency with some is in the direction of superstition (and here again I use the term in no offensive sense; I mean by it simply what S. Paul meant when he said to the worshippers of an "Unknown God" that they were *religious overmuch*); but no one would think of accusing persons with this tendency of drawing their views from the Bible: they are led by feeling, *deep religious feeling*, which it is impossible for any pious mind not to respect. Their principles are also drawn wholly from within, from a subjective source; but they are not pneumatological, but psychological in an exaggerated degree. And thus, as the balance of man's threefold nature is disturbed, and as it swings to the one side or the other, will the result be an imperious self-satisfied spirit of unbelief in all that cannot be reduced to the dimensions of reason, or a readiness to believe and worship whatever touches the heart and affections. The man who puts "reason" for the basis of religion starts upon an incline whose bottom is infidelity. He cannot receive the doctrines of the Incarnation, the Resurrection, or the Ascension, with all that belongs to each, as any consequence following logically from his first principles; those first principles therefore must be false if Christianity be true. I must here, I know, differ from some statements made by members of this Institute, particularly by Mr. Row, and I think Dr. Irons, on the subject of "reason," and I do so upon strictly philosophical grounds. Faith is not the product of reason, it has a closer affinity with what is psychological than with what is pneumatological. In any case it has not "reason" for its *basis*. Reason gives us knowledge, not faith.

27. Another point is *moral probation after death*. Is moral probation possible in Hades? I mean, of course, upon the view taken in this essay of man's tripartite nature. The principles here stated would lead me to conclude in the negative—it is not possible. Without Psyche I could not conceive of moral fall or moral elevation in man. Angels no doubt have fallen, but man's nature, if threefold, cannot rise or fall in a state of disintegration. The spirit may exist, but man cannot improve. He may be pardoned: this is another and a different question, and in no sense dependent upon the view here taken of his threefold nature. What I wish to notice is, that probation is impossible in the spiritual world, because man's ethical and religious nature is, in the view here taken, as it were in abeyance. If I had to accept the doctrine of moral probation after death, I must therefore postpone it till after the resurrection.

28. Another question of inference is that of the *sleep of death*. I should, upon the views here enunciated, infer from the New Testament that it is as true of Pneuma in our case as in the case of the great God, that it "slumbereth not nor sleepeth," for there is nothing to require sleep in Hades, the outer senses are cut away, there is no perception of material objects, no origin of ideas from outward material things, no bodily pulsation, nothing that causeth man to faint or grow weary. Those Scriptures which speak of death as a sleep must therefore refer to the absence of perception through loss of body and soul, not to the absence of self-consciousness. Spirit may see and hold converse with spirit, in the spiritual world, and for aught we can tell in this world also, though perhaps at such times only as those spirits, yet in the flesh, withdraw themselves, so to speak, from the material world and become absorbed in spiritual contemplation. Samuel was at first invisible to Saul, but the spirit of the witch saw him, and he saw the witch.

29. Another point of inference is one in regard to *space and time*. The view taken in this paper would lead to the inference that the idea of space and time does not enter into the consciousness of spirits in Hades. The clockwork of the material world is there not only never seen, but even the gauge which the moral or psychical affections supply, is wanting. There is therefore nothing so far as we can conceive to measure space or time with. Hence the dead, though conscious and active in the spirit-world, may find it true in their experience that a "thousand years are as one day," and that to them the coming of the Lord, ever represented in the New Testament as near, will literally appear to have been so when it shall happen, there being to each but the conscious lapse of the time spent here between the announcement and the event itself. Between death and the consummation I should infer that there is no conception of time. How far this may remove the difficulty which some have felt in regard to some words of S. Paul, about the Second Advent, will depend, perhaps, very much upon their ability to accept this inference as a valid one. To my own mind there is no difficulty in receiving S. Paul's words in their most literal acceptation.

30. These thoughts may serve as an illustration as to what I meant when I said that there are many inferences to be drawn from the pneumatology and psychology of the New Testament that go far to settle many deep and interesting questions which do not take their rise in Scripture interpretation so much as in the subjective views of persons themselves who discuss them. I will close with repeating a

statement made in my opening remarks, that the language of the New Testament, though penned in many of its parts by unlearned men, has yet a consistency and philosophical accuracy about it, that we do not find elsewhere, in regard to man's nature. The Fathers stand high with me as theologians and guardians of the faith, but in their use of the terms *Pneuma* and *Psyche* they fall much below the New Testament in point of consistency and accuracy. With us we have come to speak of man in a twofold sense, as having soul and body; and the common people would not very readily understand an accurate preacher or writer who should speak of the soul as mortal and perishable, yet as a matter of Scripture statement, I think, it is so.

The CHAIRMAN.—This morning I received a letter from Mr. Gosse, one of our Vice-Presidents; it contains some brief comments upon Mr. English's paper, and, with your permission, I will read them:—

“The Rev. W. W. English, in this Essay, appears to look on ‘Spirit, Soul, and Body,’ as three essential constituents of human nature. I venture to think, however, that the testimony of the New Testament is not in accordance with this opinion. Setting apart the multitudinous occurrences of the word *Πνεῦμα* and its derivatives, which refer to the Third Person of the Blessed GODHEAD; those in which evil spirits are clearly meant; those which signify a moral condition or temper (as Rom. xi. 8; 2 Cor. xii. 18, &c.); and a few, in which the word seems to signify a dispensation or phase of the Divine economy (as 2 Cor. iii. 6, 8);—there remain many which manifestly glance at a constituent principle of man, so designated. But, in all these cases,* if carefully examined, it will be found, I think, that it is *renewed* man, *converted* man, man ‘*passed from death unto life*,’ who is spoken of. It is plain, from the Divine testimony, that a godly man is not a man in the flesh, improved;—for the flesh is incorrigible; it not only ‘*is not* subject to the law of God’; but it ‘*cannot be*’ (Rom. viii. 7); he is a ‘*new creation*, *καὶνὴ κτίσις*’ (2 Cor. v. 17). Now, *what* it is that is ‘*created anew*,’ when such a change occurs, is shown in that grand revelation, 1 Cor. xv., where alone in the Holy Scriptures the subject under consideration is at all technically treated. Here the *body* which true believers (and surely of no others is the Apostle speaking, in the whole argument) possess in the present mortal state, is called *σῶμα ψυχικόν*,—a soulish body; and is contradistinguished from that *body* which they shall acquire at the last trump, which is called *σῶμα πνευματικόν*,—a spiritual (or spiritish) body. The former is expressly said to be derived from Adam, who was made a living *ψυχή*;

* In Luke viii. 55, where it is stated of the daughter of Jairus, that “her spirit (*τὸ πνεῦμα αὐτῆς*) came again”; the word is perhaps equivalent to “breath.”—P. H. G.

and is therefore the common inheritance of all men, as descended from *him*. The latter is as distinctly said to be derived from the Lord Christ, who 'was made a life-making πνεῦμα'; and is therefore peculiar to those who are federally united to *Him*; those who are 'in Christ.' But the whole tenour of the Apostle's argument shows that this respective origination is not only true of the two *bodies*,—the present corrupt, mortal, soulish, and the future immortal, glorious, spiritish;*—but must be predicated of the subtile immaterial *principle*, which animates each of the two respectively. The true believer possesses *both* of these animating essences; for he is a *compound*, or, so to speak, a *double* entity. He still has the body and the soul which he derived from Adam; the former of which, certainly, the latter, probably (see, however, 1 Thess. v. 23), will end, either at death, or by change at the coming of the Lord;—and he has the *new* principle of life, which is that of the risen Christ; for 'Christ . . . is our life' (Col. iii. 4); and 'he that is joined unto the Lord is one spirit' (1 Cor. vi. 17). But of this latter life, we possess as yet only the spiritish moiety: the *body* proper to this heavenly nature we wait for. Our glorified Head possesses both: His body is risen, and 'is entered into His glory.' We possess the life, 'the spirit' now, in actual fruition and experience: the spiritish body we have not yet, except in sure reversion, and representatively, in Him our Head and Forerunner. It does not appear to me that the Holy Scripture ever attributes πνεῦμα (in this distinctive sense) to an unrenewed, unconverted man. He is, and must be, ψυχικὸς ἄνθρωπος; whereas the new-created, though he may be σαρκικός, is yet πνευματικός,—πνευματικοῖς πνευματικὰ συγκρίνων (that is, I think, not 'comparing spiritual things with spiritual' as in A.V., but 'discerning spiritual [things] by spiritual [senses or faculties]'). It is worthy of observation, that the struggling, sincere, but ever vanquished man, whom the Apostle personates in Rom. vii., and whom I believe to represent a legally enlightened and conscientious, but (up to ver. 25) *unrenewed*, man; speaks of νοῦς, but *not* of πνεῦμα:—*this* appears not till the following chapter, when he can joyfully testify that 'the Spirit's law (of Life IN Christ Jesus) hath made him free' (viii. 2).

"P. H. GOSSE."

I propose that the thanks of this meeting be given to Mr. English for his interesting paper, and also to Mr. Gosse for the remarks which he has been kind enough to send. It is now open to any one present to make such observations as he may desire to offer.

Rev. C. A. Row.—I rise first, because the author of the paper gives me a distinct challenge; but I am challenged in good company, that of Dr. Irons, who, I regret, is not present. If Mr. English has read Dr. Irons's papers on 'Human Responsibility,'† he will have seen that the matter is

* I beg indulgence for the coining of these terminants; no words in English use are available.—P. H. G.

† See vol. iv. of the *Transactions*.

there put beyond controversy. I am also sorry that Dr. Rigg is not here, for when I read my paper "On Dr. Newman's Essay in Aid of a Grammar of Assent,"* Dr. Rigg expressed himself in the discussion that followed even more strongly than I did; and I think it right to say that the article which I then alluded to—contained in the *London Quarterly*—one of the most important that has appeared on this subject, is from Dr. Rigg's own pen. Now the author of the present paper personally alludes to Dr. Irons and myself, and challenges us as holding opinions that tend to infidelity. I will read the passage :—

"The man who puts 'reason' for the basis of religion——"

I do not know that I have ever used that phrase.

"——starts upon an incline whose bottom is infidelity. He cannot receive the doctrines of the Incarnation, the Resurrection, or the Ascension, with all that belongs to each, as any consequence following logically from his first principles; those first principles therefore must be false, if Christianity be true. I must here, I know, differ from some statements made by members of this Institute, particularly by Mr. Row, and I think Dr. Irons, on the subject of 'reason,' and I do so upon strictly philosophical grounds. Faith is not the product of reason, it has a closer affinity with what is psychological than with what is pneumatological. In any case it has not 'reason' for its basis. Reason gives us knowledge, not faith."

Now if that is a true statement, I am in a very unfortunate position; because, having been trying to defend Christianity all my life, it would follow that I had really been defending infidelity. There are certain points in Mr. English's paper which I apprehend Mr. Graham will discuss, indeed he has taken them up in a paper to be read here a month hence; therefore I will leave him to deal with them. There is but one section in the paper to which I can give my cordial assent, that is the third, and I must add one more illustration to it;—I have been struck by an accommodation in the New Testament respecting the name of God; God is only once called the Lord of Hosts there, in a passage where St. James is referring to the Old Testament; but in the Revelation the phrase is altered from "Holy, holy, holy, is the Lord God of Hosts," to "Holy, holy, holy, Lord God Almighty."

At the end of his 17th section, Mr. English has this passage :—

"'The Lord God formed man of the dust of the ground (his body), and breathed into his nostrils the breath of life (spirit), and man became a living soul;' that is, having Psyche, a bodily frame with life in it."

Now I cannot say it is fair to assert, that because the words are "the Lord God formed man of the dust of the earth," that this means mere bodily organization, and that afterwards came the breath of life, and by the act of the union man became a living soul. As to the passage in

* Vol. vi. p. 45.

St. Paul in which the division of man is supposed to be made into the three principles of spirit and soul and body, the question arises, did the writers of the New Testament use scientific language on this subject? I have examined the New Testament, and I am happy to say that Mr. Graham agrees with me in thinking that on this subject they did not use scientific language; and I do not see how it was possible for them to have done so without a great deal of previous definition: they use the common language of the Hellenic Jewish race. Take the English language as an example, and the distinction which Coleridge draws between understanding and reason; the only way of using these terms scientifically is by using definitions; because, as used in common English they have a very wide meaning. So it is with the Greek New Testament. But Mr. Graham will take up this point in the paper which he is to read here, therefore I will not occupy your time upon this part of the subject any longer, but will at once proceed to a point on which I feel more especially called to give an opinion. Let us turn to the 18th and 20th sections of the paper, which I own to have read with the most profound astonishment. In the first of these, Mr. English says:—

“The spirit (Pneuma) comprises the directing, self-conscious principle, the *ego*, that which constitutes man’s real personality. ‘The flesh lusting against the spirit, and the spirit against the flesh,’ is the Pneuma in its renewed state, struggling with old habits of the body, become so powerful as to be almost a law unto themselves.”

I shall not argue whether Mr. English is right about Pneuma and Psyche, but will assume his principles, and proceed to show that they do not carry out his theory. It is very difficult, after Mr. English has evaporated all the various parts which we usually think belong to the Pneuma, to make out what is left; but here I read that the personality, or the *ego*, is found in the Pneuma. Then he goes on to say:—

“Pneuma, therefore, comprises not only will and self-consciousness, but discernment, reason, and I may add also speech (*logos*).”

That is a most curious account of what he conceives to be the Pneuma. But what is the consequence of it? Mr. English seems to think that the personality, and what we call the intellect, or understanding, are the chief constituents in what forms the Pneuma in man, and, I apprehend, of the Pneuma of angels, and of God also, for that seems to me to be a necessary consequence from all these assertions. Then I should observe that so far as language respecting the human mind is concerned, there are several other terms used in the New Testament of equal importance; *νοῦς*, for instance, is used very strongly in an ethical sense in the New Testament; and *καρδία*,

* Dr. Harold Browne says: “All animals have the body, all the living soul (Gen. i. 20, 21), but the breath of life, breathed into the nostrils by God himself, is said of man alone. Cp. ‘the body, soul, and spirit’ of ancient philosophy and of the apostle Paul.”—ED.

or heart, is also commonly used to describe certain portions of man's nature ; and we know that these expressions are not used in a scientific sense : then there is another phrase—bowels—which is often used to denote certain portions of the moral nature of man. There are other expressions of a similar nature. Language, Mr. English says, is not always articulate, but it is always the vehicle of thought, and never of feeling. I must say I read this with astonishment. Has Mr. English read Shakspeare, and does he not know that it expresses both ? Inarticulate cries are merely expressive of feeling ; but much articulate language is not the expression of thought, or else we should have much more thought in the world than we have.

The CHAIRMAN.—I do not think Mr. English means ratiocination—it is merely a loose phrase.

Mr. Row.—But it is very unwise to use it in such a way.

The CHAIRMAN.—Certainly.

Mr. Row.—In one word, language, according to Mr. English, belongs to the Pneuma, and has its origin there, either in a concrete or articulate form, and is the result of man's threefold nature. Accordingly, language is restricted to the Pneuma, which is purely intellectual—so far as I can discern from this paper—including my personality, or *ego*, and self-consciousness ; and further than this, Mr. English has not told us much about it. Now I come to the 20th section ; I have observed that the word *νοῦς* is used ethically in the New Testament. In the 7th chapter of the Epistle to the Romans, St. Paul says that with the *νοῦς* he serves the law of God ; and there are dozens of similar cases where the word is plainly used in an ethical sense. The section in question begins with a strange statement :—

“The soul (Psyche) as the vital ethical capacity in man's moral nature, has of necessity a closer affinity with the affections of the perishable body than with Pneuma. This follows, I think, from the necessity of the case.”

I think that when Mr. English put forward so all-important an assertion as this at the beginning of a section, it was only right to back it up with some reason ; I do not see one atom of necessity in the matter. Mr. English is laying down a principle in philosophy, the effect of which has a serious influence upon the whole range of religion and morals—that the Psyche contains the vital ethical capacity in man's nature. Remember also that, so far as I understand it, the Psyche is mortal. Am I not right in that ?

The CHAIRMAN.—Yea.

Mr. Row.—That it does actually contain the moral ethical capacity is a statement which is in the face of nearly every assertion of the New Testament. Mr. English continues :—

“And here, again, the New Testament coincides with this thought.”

I deny this. Then he refers to myself, and says :—

“I have no wish to disturb the calmness of any that think ‘reason’ is the basis of religion and morality, but I must say that such a view is wholly alien to sacred Scripture, and, I think, incompatible with sound philosophy.”

I may have used some similar expression, though I do not remember it. Now we come to a statement of the most important and serious character. Mr. English says :—

“Psyche is the vital ethical capacity in man, and its tenderest thoughts, its highest and holiest aspirations, are not seldom trodden underfoot by the dominance of that Pneuma, which even devils have.”

It may be true that the Pneuma in devils treads underfoot what is good in man ; but remember that the Pneuma is, according to this paper, the essence of Almighty God, and of the angels. Then Mr. English puts a very indefinite qualification upon that assertion. He says :—

“I do not here say that Pneuma has nothing to do with religion and morality.”

If it embraces the intellect, it must have something to do with them. Then he says :—

“It has its part to fill in the constitution of the human conscience, and also in religion and morality ; but it is not, I venture to think, upon distinct grounds, the ground of Holy Scripture, the *basis* of either.”

A line further on, he says :—

“The basis of religion, as well as of morality, is to be found in man’s psychical, rather than pneumatical, nature ; a principle well worth further development and illustration than I can here afford to give it.”

I am sorry he should have made such a statement, and not have given us some reason for his belief. Again ;—

“For it seems to me that reason and rationalism have well-nigh gone mad in these our times. Intellect has its proper sphere, but it cannot take the place of the soul without stripping morality and religion of all that is holy and tender, and good.”

Then what is the result of all this ? The Pneuma, being stripped of all morality, and ceasing to be the centre of what we call the higher affections of our nature, is reduced down to pure intellect, or something very like it ; and the Psyche, or soul, being perishable, the whole of the moral nature of man perishes along with it. The following passage is still more remarkable :—

“The Pneuma is a foundation, I venture to think, quite incapable of bearing the kind of superstructure which we mean when we speak of what is holy, and just, and good.”

The Pneuma is unable to bear the superstructure of what is holy, just, and good ! God is a Pneuma, and therefore He is neither holy, just, nor good !

The CHAIRMAN.—That is scarcely a fair interpretation.

Mr. Row.—That is the strictly logical consequence of what Mr. English says.

The CHAIRMAN.—He speaks of the Pneuma in man.

Mr. Row.—But he tells us more than once that it relates to the Divine Spirit.

The CHAIRMAN.—I do not think that much good is to be gained by forcing the author's language too far.

Mr. Row.—I do not wish to do so ; but I think it is very important to show the logical consequences of the principles here laid down. What Mr. English in effect says, is that the Pneuma is no foundation on which you can erect what is holy, just, and good. I agree with Mr. English in thinking that the Pneuma does represent the higher faculties of the mind, and the Psyche the lower faculties ; but I do not agree with him in thinking that the Pneuma is incapable of bearing the weight of the highest aspirations of the human soul. I will not enter into any discussion about Aristotle and Plato, for we have more important matter before us than they ever treated ; but I want to call attention to a misquotation from Scripture, which Mr. English has made. He gives a quotation to show that the Psyche, as distinct from the Pneuma, is the seat of the affections, but he gives it only partially. The quotation, in the paper, is : “Thou shalt love the Lord thy God with all thy soul ;” but in the Bible the passage runs thus :—“Hear, O Israel, the Lord our God is one God, and thou shalt love the Lord thy God with all thine heart and with all thy soul, and with all thy might”—“with all thy *νοῦς*” in fact ; which Mr. English translates as though it were *πνεῦμα* ; leaving out the very phrase which bears upon the point. Then he quotes the words of the Canticle of the Virgin Mary ;—“My soul doth magnify the Lord,” but he omits the following words, “and my spirit hath rejoiced in God my Saviour.” The word is really “exults,” and the conclusion is that in the Pneuma there are moral and spiritual principles that can rise to the height of exultation. And now I must defend the ladies for a moment. Mr. English has treated them so very badly that I feel compelled to say a word in their vindication. He has represented the female as having a predominance of the Psyche, which is used in a very unfavourable sense ; in the Epistle of St. James, it is said that a certain thing is “earthly, sensual (psychical), and devilish.” I own that Mr. English's argument appears to me to be a very singular one. In one part of his paper, you will find it stated that inasmuch as woman was made of Adam's rib, and inasmuch as the Psyche resides there, therefore women have got a larger share of the Psyche than they have of the Pneuma, which belonged to Adam. It seems to me that we might as well argue that inasmuch as men do not now come into existence by the direct breathing of Almighty God—for He breathed into Adam, but not into Eve, nor into any of us—that therefore we have lost some share of the Pneuma too. Then Mr. English gives a passage in Latin from Scotus—I did not know that Scotus has so bad an opinion of women. I will translate it :—

“The human nature of man is of intellect, which is called in Greek *νοῦς* ; of woman, sensation, of the feminine gender, *αἰσθησις*, which means sensation.”

Again, Mr. English complains of the infidelity of the French, arising from the predominance of the Pneuma, the very highest part of man, and says it

is because they have such a predominance of the Pneuma, that infidelity is so rife amongst them! I will again refer you to a passage which I have already read, for I will not go into the other remarks on the subject of infidelity. There is the same assertion in this part of the paper, that the infidelity of modern writers arises from the distinct predominance of the pneumatical element. Mr. English says :—

“The man who puts ‘reason’ for the basis of religion, starts upon an incline whose bottom is infidelity.”

The object of my paper “On Dr. Newman’s Essay in Aid of a Grammar of Assent,” was to show that the very thing here spoken of was the means of getting out of it ; but I am afraid that Mr. English holds some portion of Dr. Newman’s philosophy. Mr. English goes on :—

“He cannot receive the doctrines of the Incarnation, the Resurrection, or the Ascension, with all that belongs to each, as any consequence following logically from his first principles ; those first principles, therefore, must be false if Christianity be true. I must here, I know, differ from some statements made by members of this Institute, particularly by Mr. Row, and I think Dr. Irons, on the subject of ‘reason,’ and I do so upon strictly philosophical grounds.”

Now I freely admit that reason cannot discover everything under heaven, but when a thing is discovered, it may agree with my highest rational convictions. Reason cannot discover creation ; there are ten thousand things which are not discovered by reason, but which are yet within its compass afterwards ; and that, I endeavoured to show in the last paper I read before this Institute. I do not hold that reason is competent to discover everything under heaven ; but when God Almighty has revealed a thing, whether by nature or by divine revelation, reason is the only thing that is capable of dealing with it. Mr. English continues :—

“Faith is not the product of reason, it has a closer affinity with what is psychological, than with what is pneumatological. In any case, it has not ‘reason’ for its basis. Reason gives us knowledge, not faith.”

Now I am somewhat astonished at these observations, for in the Epistles of St. John, knowledge is placed as the fundamental, ethical, and spiritual principle twenty-seven times ; and faith only seven times. I think Mr. English has adopted a narrow view of reason ; I do not mean the logical faculty alone, but the whole of the rational faculties of man, which are vastly more extensive than the logical faculty. This attempt to separate faith from reason I consider is contrary to Scripture. The Epistle to the Hebrews tells us that “he that cometh to God must believe that He is, and that He is a rewarder of them that diligently seek Him.” How do I believe that God is, except by a rational act ? But that is described as an act of faith, because he says it is impossible without faith to believe in God. These two things are necessary and antecedent to all revelation, for we cannot accept it without believing, first, that God

is, and secondly, that He is a rewarder of them that diligently seek Him. I will only mention one other point,—Mr. English says that the ethical part of man's nature and his affections are to be found in the Psyche. He does not define the body ; but there is one passage in the Scriptures—the beginning of the 12th chapter of the Epistle to the Romans—to which I should like to call his attention. It runs thus :—“ I beseech you, therefore, brethren, by the mercies of God, that ye present your bodies a living sacrifice, holy, acceptable unto God, which is your reasonable service.” This passage alone proves that the language of Scripture on this point is not scientific but popular. (Cheers.)

Rev. C. GRAHAM.—I will not occupy much time in what I have to say upon this paper, as I shall shortly have the honour of bringing a paper of my own before the Institute on the tripartite nature of man. But, in order to corroborate what Mr. Row has stated, I will quote one passage which I think bears directly upon the subject :—“ This is life eternal, that they might know Thee, the only true God, and Jesus Christ, whom Thou hast sent.” “ That they might know Thee, the only true God.” Without a knowledge of God, and a knowledge of Christ, as the expression of what is in God, there is no salvation. With regard to Mr. Gosse's view, that in unregenerate man there is no spirit—that the spirit is something which man receives when converted and regenerated,—I may quote a passage which will not harmonize with that opinion. It is the word of Elihu, who uttered divine wisdom (Job xxxii. 8) :—“ There is a spirit in man, and the inspiration (the *neshamah*) of the Almighty hath given them understanding.” There is a spirit in man as man—in universal man. There is a spirit in man that is not restricted to regenerate man, and the inspiration of the Almighty hath given them, universal man, understanding. I must say that there is thought in this paper of Mr. English's ; there is research, and there is reasoning in it ; it is not obscured with metaphysics ; Mr. English gives his views on the whole distinctly and clearly, but I must say that I take exception to the main positions. I quote a passage from the first section of his paper :—

“ Taking the New Testament as a text-book in regard to the science of pneumatology and psychology, I find that spirit, the immortal part, whether as referring to God, to man, or to demons, is there *Pneuma*, never *Psyche*.”

Spirit, as referring to God, in the New Testament is never *Psyche*. Now I would refer to the 18th verse of the 12th chapter of St. Matthew :—“ Behold my servant, whom I have chosen ; my beloved, in whom my soul is well pleased.” That is God who speaks,—“ my beloved in whom my *Psyche* is well pleased.”

Mr. Row.—That is from the Old Testament. St. Matthew is referring to another similar passage, and says it is a quotation from the Old Testament.

Mr. GRAHAM.—I say that *nephesh* in the Old Testament answers to *Psyche* in the New, and *ruach* to *Pneuma*. Let any one look at the quotations for himself. We cannot, then, accept this as an argument. Look,

again, at the 38th verse of the 10th chapter of the Epistle to the Hebrews :—
 “Now the just shall live by faith ; but if any man draw back, my soul shall have no pleasure in him.” There, again, is *Psyche* in reference to God.

Mr. ROW.—A quotation from the Septuagint.

Mr. GRAHAM.—Well, be it so ; I say that here you have “soul” used in the New Testament in relation to God in two passages. I will now, for a few moments, invite attention to one or two other matters. First, in reference to the title “Lord of Hosts,” in his 3rd section, Mr. English says :—

“I will here give an illustration of this from the different names applied to God. In the Pentateuch, in Joshua and Judges, we never meet with the title ‘the Lord of Hosts’; but in the books of Samuel, Chronicles, and throughout the rest of the books of the Old Testament, it occurs frequently.”

Yes, but you meet in Exodus with “the hosts of the Lord” going out of Egypt. But does the phrase occur in Ezekiel, in Job, or in any of the books written by Solomon, in Proverbs, in Ecclesiastes ? It does not occur in any of these. Mr. English uses it tropically ; but before you can have a tropical use, you must have a literal use. Then there is another passage in the same section to which I would call attention :—

“But just as the Church came in contact with what remained that was good of the world’s religion, she took up, as wisdom itself would have directed, the terms of that remnant, and made them her own.”

I should prefer saying it was the spirit of inspiration that took them up. It is not the Church that gives us the Bible, but God.

The CHAIRMAN.—Mr. English does not mean the Church in that limited sense—he would not differ from you as regards that. He means rather that the language was adopted by the Holy Spirit.

Mr. GRAHAM.—Well, I should prefer to see it otherwise put. Then he says :—

“The priest of the older religion was ‘Priest of the Most High God.’ The earlier Canaanites were of course familiar with this title ; and hence, as they came upon the scene it reappears.”

Mr. English regards the title “Most High God” as originating in the idea of distance, “one far off”; but I take it that in the Scripture it refers to Jehovah as King of Kings, Lord of Lords, above all potentates and authorities of the earth. But I will not dwell on these points. I come now to the close of the 7th section :—

“‘Nephesh,’ soul, is not uniformly employed in the same sense, but the soul is not therefore confounded with either the spirit or the body of man. ‘Nephesh’ means, in the earlier books, a bodily organism, a living frame.”

In fact it means the entire man, and, as meaning the entire man, it embraces the *nunch*. But is it true that in the earlier books it is used merely in relation to organic man ? Do we not read that “as the soul of Rachel was departing” ? Do we not also find Jacob saying : “O my soul (my *nephesh*),

come not thou into their secret ; unto their assembly, mine honour, be not thou united." The soul here certainly does not refer to bodily organization. The section goes on :—

"‘Nephesh’ means in the earlier books a bodily organism, a living frame ; sometimes, as in Numbers, a dead corpse ; but in the Psalms it is applied rather to the living animal principle. It is never, like ‘neshamah’ and ‘ruach,’ applied to God, who is pure Spirit."

But is *nephesh* never applied to God, who is "pure Spirit" ? I find it so applied again and again—I can give you many distinct quotations in proof. I take such a passage as that in the 26th chapter of Leviticus, where God says : "My soul shall not abhor you" ; or that in the 10th chapter of Judges, where it is said of God, that "His soul was grieved for the misery of Israel" ; or that in the 1st chapter of Isaiah : "Your new moons and your appointed feasts my soul hateth" ; or that in the 5th chapter of Jeremiah :—"Shall not my soul be avenged on such a nation as this ?" I might refer to passage after passage where the word is used in relation to God ; and yet Mr. English distinctly says here that it is never so applied. Here it is used as synonymous with spirit. In point of fact, we may predicate just as truly that God is *nephesh*, as that God is *ruach*. God is soul, as truly as God is spirit. I come now to the 10th section of the paper :—

"Spirit (Pneuma) occurs about 350 times in the New Testament. In each case it is applied, in a literal or figurative sense, to the highest powers of being, the immortal part of nature."

Now that is a proposition to which no exception is given ; but when you come to examine the Holy Scriptures, you find that you are obliged to make exceptions. I read in the 11th chapter of the Epistle to the Romans, of "the spirit of slumber" ; and I also read of "the spirit of fear" ; and of "the spirit of bondage." In the Second Epistle to the Thessalonians, we read : "And then shall that wicked be revealed, whom the Lord shall consume with the spirit of His mouth." In Isaiah, and in Hebrews, the word is "breath," so that "spirit" and "breath of his mouth" are clearly synonymous. Then, in the 13th chapter of Revelations, we read that the false prophet is to give breath, or Pneuma, to the image of the beast. There are many exceptions in the Holy Scriptures, and therefore there is no basis for the statement made by Mr. English. In the 11th section I find :—

"Soul (Psyche) occurs about one hundred times in the New Testament, and is almost as often translated 'life' as 'soul.' There are no passages where 'life' would not be the correct rendering, for it uniformly implies life, as combining soul and body ; it never refers to life, or pure spirit, in the intermediate state."

I take that point up in my own paper, therefore I will not go into it now, except to call attention to one or two passages. In the 5th chapter of the Epistle of St. James, we read : "If any of you do err from the

truth, and one convert him, let him know that he which converteth the sinner from the error of his way shall save a soul from death." Is that saving from physical death? Then in the Epistle to the Hebrews I find this passage :—"Obey them that have the rule over you, and submit yourselves, for they watch for your souls, as they that must give account, that they may do it with joy and not with grief." Is that watching to preserve the life of the physical organism? That soul and life are always interchangeable is an assertion that will not stand. I wish now to touch upon a point which will somewhat lighten this heavier argumentation. In the 29th section I find :—

"Another point of inference is one in regard to space and time. The view taken in this paper would lead to the inference that the idea of space and time does not enter into the consciousness of spirits in Hades. The clockwork of the material world is there not only never seen, but even the gauge which the moral or psychical affections supply is wanting. There is, therefore, nothing, so far as we can conceive, to measure space or time with."

Now that is a very curious speculation, and certainly it took me quite by surprise. Where is this Hades? I find Christ saying to the thief: "To-day shalt thou be with me in paradise"; and St. Paul says: "Absent from the body, present with the Lord." Stephen, we are told, "looked up steadfastly into Heaven, and saw the glory of God, and Jesus standing on the right hand of God." And how do we know that, when disembodied, we may not see the whole universe of being? I do not say that we shall, but where is the argument to prove that we shall not?

The CHAIRMAN.—But that would not be contrary to Mr. English's views.

Mr. GRAHAM.—I think it would; because if we saw the universe, we should see the revolution of the orbs, which would give us the idea of the lapse of time. Does the Pneuma retain memory? because, if so, it brings back to us the past with our experience of the sequence of events, and of the lapse of time. Will not the spirit be conscious of time past as differing from the present? Then, again, how do we measure time, or know of its existence? Not so much by the revolution of the heavenly bodies, as by our own mental acts and emotions. We feel and think, and just as we feel and just as we think we have a consciousness of the lapse of time. Time appears to us long or short according to the strength and number of our emotions and thoughts. (Cheers.)

Rev. J. H. TITCOMB.—In the first place, I should like to adduce one argument against Mr. Gosse's view, namely, that the word "Pneuma," or spirit, simply has reference to the regenerated condition of man. In addition to the quotations given by Mr. Graham, I call to mind that text in the book of Ecclesiastes in which, speaking of death generally, it is said "the spirit shall return unto God who gave it"—the Pneuma (*ruach*), implying that all created mankind possess the Pneuma (*ruach*); and that that is an essential and conditional part of man, which, after death, is disintegrated from the body, and goes to its rest. Then I should like to say one or two words with respect to the controversy opened by Mr. Row, namely, as to how far reason, as

distinct from faith, may be considered the basis of religion. We are always in danger of riding our hobby to death : hence, to say that religion is based on reason, is as little erroneous, as it would be to say that it is based on faith. Reason and faith are twin sisters—it is impossible to separate them in Christian experience. Religion based upon reason without faith would be pure rationalism ; and religion based upon faith without reason would be pure superstition. (Cheers.) It is by the union of the two under the teaching of God's Holy Spirit, that we conceive what God is, and that we can receive from Him the gift of everlasting life. As to spirit, soul, and body, I find that Mr. English, in his 5th section, calls them prime factors in human nature, co-ordinate and inseparable. In some respects, this is perhaps fair. They are separable, however, in this respect ; that pneumatology may be considered as the science which relates to the spirit ; psychology may be considered separately, as the science which relates to the soul ; and physiology may be considered as a science quite distinct from the others, relating to the nature of the body. As matters of thought and subjects for study, those three things may be viewed as separate and distinct sciences. The body, I take it, would be simply the human frame ?

Mr. Row.—I think not.

Mr. TITCOMB.—I do not mean in its dead, but in its living state. Then the soul, according to this paper, would be the vital ethical capacity in man's nature, and the Pneuma would be the pure immaterial spirit. Now the question we have to discuss—for this is the crucial point of the paper—is not that the body can be separated from the other two, for that no one would dispute, but that the soul and spirit are separable and are separated by death, the soul being mortal and dying, while the spirit is liberated and goes to its rest. Now we ought seriously to protest against that position. I should be sorry if it went out to the world that the Victoria Institute, which was designed to conserve the principles of religion, should speak so loosely upon the question of the soul, as to give its imprimatur to the doctrine that the soul is mortal, and dies, and is disintegrated.

The CHAIRMAN.—One of our rules is that members are individually responsible for their opinions. We do not give an imprimatur to anything and everything uttered here.

Mr. TITCOMB.—To show that the soul, as the ethical part of man, survives after death, and is inseparable from the spirit, I will give proofs from the New Testament. The parable of Lazarus and Dives, which we read yesterday in church, although it is only a parable, yet really in its nature does set forth a moral relationship on the part of the disembodied portion of man after death with that which has been left behind. The soul in hell is described as recollecting—there is memory, as sympathizing with and feeling for the misery of those who belonged to him by kinship in nature. Surely there is an ethical capacity surviving after death, as shown by our Lord Jesus Christ, who spoke as man never spake ; and if that be true, I do not know how the Psyche can have died, and the Pneuma alone have survived. They are both so inseparable, that I cannot understand how they could be separated.

The CHAIRMAN.—There is the passage in which Dives calls for a drop of water, which relates to the body.

Mr. TITCOMB.—Yes, but that belongs to the language of poetry, and is more like a metaphor than a representation of conversation would be. One will bear argument ; the other will not. Then Our Lord is described after death, in a very disputed passage, as going to preach to the spirits in prison,* those spirits in the time of Noah having been disobedient. If that be interpreted as representing the setting forth by Christ Himself to those spirits—a statement of what He had done for man, in the place of disembodied souls—I do not know how the Psyche, the ethical part of man, would not be there as well as the Pneuma. Otherwise, how could preaching have been of any use ? There must have been an appeal to reason and to the affections, or otherwise preaching would have had no basis. Then there is the passage quoted in the paper, but got over very slightly and superficially, where St. John describes the souls under the altar crying out, “How long, O Lord, how long ?” Is not that a representation of what is ethical, and involving memory ? Then, lastly, there is that oft-repeated text “What shall it profit a man if he gain the whole world and lose his soul ?” Are we to think that mortal life is of such great account as that ? The passage must refer to that which will survive after death ; thus we have the Psyche or soul surviving death. And having gone so far, we come to a point that has not yet been touched upon,—how far the psychology presented to us by the brute creation is analogous to our own. I do not know how it ought to be imported into this discussion, but, taking the interpretation of Psyche which is given in Mr. English’s paper, I should lay it down that one of its weakest points is the necessary inference that man’s Psyche, dying with him, is very little better than the Psyche of brutes. It is indisputable that the dog, for instance, has mental properties and moral properties, which approximate to our own. It may be a new idea to some present, but there are ethics, so to speak, in the affections, habits, and instincts of the brute creation. A dog may love its master—it has memory ; and it almost has veneration. It is a very difficult question, but there is a Psyche or soul which is perishable, and which is the analogue to the Psyche in this paper. The doctrine of which I complain lowers the human Psyche to the level of the brute Psyche ; of course there being a vast interval between the two, but their nature being the same. As the soul is the life of the body, so I take it the spirit is the life of the soul. You reach the soul through the body, but you only reach the spirit through the

* Biblical exegesis is without the scope of the objects of this Institute, otherwise I would give at length the difficulties which result from attaching such a meaning to the verse in question. Pearson, in a most elaborate argument, holds that the Spirit of Him “who is from everlasting,” strove with the spirits of those who lived before the Flood (Gen. vi. 3), and that He used Noah as His instrument in preaching righteousness to them (2 Pet. ii. 5) ; that the spirits of those who rejected His word were *now* in prison (awaiting the sentence of the last day). Most commentators support this view. See also Parkhurst.—ED.

soul. I forget who it is, but some one has said that the body is the house in which the soul lives, but the soul is the house in which the spirit lives, and I think that illustrates the case very admirably—at least it appeals to me more than anything else. Death comes and separates the body from both soul and spirit; it does not disintegrate the soul from the spirit, for they, being inseparable, go together to their eternal resting-place, and the soul and the spirit are capable of being really touched, both together, by the higher power of the Holy Spirit, as in the twelfth verse of the fourth chapter of the Epistle to the Hebrews: “For the word of God is quick and powerful and sharper than any two-edged sword, piercing even to the dividing asunder of soul and spirit”; not separating but dividing between them, reaching into the spirit and renewing it. The soul, I imagine, is often touched, but the spirit not reached, and that accounts for the fact that in the New Testament the spirit is sometimes spoken of as going to heaven, and the soul is sometimes spoken of as going to heaven: they are adopted as one, because when the spirit has received its higher life it has sanctified the soul. We come to the crucial text of St. Paul, where he prays that God will sanctify them in body, soul, and spirit. When a man is converted from sin, his affections are brought into play, and his body is brought into subjection, and the whole man becomes sanctified. It begins in the spirit, passes through the soul, and the moral and ethical part of man, and is then distributed through the members. That is the exposition of it. (Cheers.)

REV. EDWARD WHITE.—I have listened to the proceedings of this evening with interest, and would be glad to be allowed to offer one or two observations. The first subject on which I should like to say a word is the use of Scriptural language. It has been proved this evening that if there be any exact or scientific language at all in the Bible, it is not uniformly employed. A remark made by Mr. Graham appears to me to be quite sound, that the only approach to scientific language on the soul is to be found in the Epistle to the Corinthians. If we look back to the Old Testament, we find it is truly said in the book of Job that there is a spirit in man. But I always guard myself when quoting from Job, for there were three or four friends of Job whose utterances were not always the utterances of wisdom, and in fact they are condemned at the end as not having spoken according to the mind of God; and when any of these discourse philosophically I will not be bound by his statements. But why should there have been a greater exactness then than now? I apprehend that they spoke then as now, indifferently of soul or of spirit. There is a passage in Ecclesiastes which is of great importance, for in the third chapter it is said: “Who knoweth the *ruach* of man that goeth upward, and the *ruach* of the beast that goeth downward to the earth?” Now there the sacred writer speaks of the animating principle of the beast under the name of “*ruach*,” and this proves that it is in vain to look for strict and scientific language in the Bible. The only approach to it is in that important passage on the creation of man, on which St. Paul comments in the First Epistle to the Corinthians—“God formed man of the dust of the earth, and he became a living soul.” English writers

attach to that phrase the idea that it was some high distinguishing principle in man, but the same thing is said of the animals that died in the Deluge. I consider that St. Paul argues on this very identity in the 15th chapter, when he says that "the first man Adam was made a living soul, but the last Adam was made a quickening spirit." There, undoubtedly, St. Paul makes a strong distinction between the Psyche and the Pneuma; and his words are a comment on the *nephesh hhayyah*; but, be it observed, St. Paul introduces the distinction to show that the first man was *χοϊκός*, a man of dust, an animal man, while the second man is a spirit from heaven. As to St. Paul's language, which is more precise than that of the other writers, turn to the second chapter of the First Epistle to the Corinthians, where he distinguishes between the *ψυχικός* and the *πνευματικός*. The *ψυχικός* is different from the *πνευματικός*, not in that he has not mind, or spirit, or feeling, but in that he has not the spiritual feeling, and is unable to comprehend the divine relations, while the *πνευματικός* comprehends all things. There has been a controversy in the Christian church for many years on the question whether the natural man possesses *pneuma*. Mr. Heard and others hold that every man has a body, soul, and spirit; but there are others who hold with Mr. Gosse that man has only body and soul, and that Pneuma is the result of regeneration. And they are not without some support from the Bible; for our Lord's own words to Nicodemus are strong, where he says "That which is born of the flesh is flesh," and "except a man be born again, he cannot see the kingdom of God."

MR. TITCOMB.—Mr. Heard believes that everybody has the Pneuma, but in a dead or torpid state until regeneration.

MR. WHITE.—Yes, that is so. One of the most able advocates of the opposite theory, Dr. William Morris, cites, against Mr. Heard, two passages—first, "That which is born of the spirit is spirit," and then that passage from St. Jude: "Fleshly men not having spirit." It may be said that that is merely rhetorical language, and that men, until born of God, may be said not to have spirit apart from their animal life; but those who are learned in the theory, maintain it most stoutly, reminding one of Luther in his battle with Zwingle, when he said "There are the words, This is my body—I defy you to contradict them."

THE CHAIRMAN.—There is no article in the Greek, is there?

MR. WHITE.—No, it is not "*the* spirit." As to the argument in Mr. English's paper, I do not like to say all I feel about it. I could speak more strongly in Mr. English's presence than I would venture to do behind his back. I cannot compliment him on his clearness. For example, taking the case of the ladies, if we are to argue anything from the silence of the Scriptures, the inference from the books of Moses is that women have neither souls nor spirits, as there is not a word in the Scriptures about their souls or spirits at all. But would not that be a monstrous exaggeration? As to the survival of the psyche, what is the inference which is to be drawn from the statement of Our Lord—"Fear not them which kill the body, but are not able to kill the soul, but rather fear Him which is able to destroy both body and

psyche in hell" ? If the New Testament doctrine were that only the Pneuma survived, there ought to be some clear statement to that effect.

Mr. JAMES BATEMAN.—So far, you have all united in pulling Mr. English's paper to pieces ; now I should like to throw in a word on the other side. I differ from its metaphysical deductions, but I think it valuable in the shaft it has sunk into other matters bearing on the relation of the Pneuma and the Psyche to being. In pneumatology—the science of spirits—there are two distinct divisions, one referring to spirits as living things, the other referring to the science of ethics and morals, and philosophy and metaphysics, as deducible from the relation between body, soul, and spirit. I thought the discussion would have turned on spirits as such, and I thought it might have been a very useful discussion too. If we gathered together the evidence contained in Scripture on spirits clean and unclean, we might find very valuable matter to assist us to form a true judgment on many points which are now controverted. We all know of the abomination of "spiritualism," and there are many who believe that the agencies at work are really the spirits of the departed ; but I utterly repudiate the notion. They are not the spirits of the departed, but I believe them to be unclean spirits that are wandering about—far more numerous than man, and quite conscious that the time is coming when they will be cast into the abyss ; and as the end draws near, we may be sure that they will be more and more active for evil ; and hence the many ways in which they now bewilder men's minds. That is one line of thought which I conceived we might enter upon, and indeed it would be very useful to do so upon another occasion. But the paper deals with the sleep of death, and moral probation after death, and space and time in Hades. Now all those things are most interesting, bearing, as they do, on the controversy between Protestants and Romanists. Moral probation after death brings us into the domain of purgatory, and it would be very useful to see what Scripture teaches, or rather does not teach, upon that point. If we could get a clear notion of the distinction between body, soul, and spirit, we would be greatly assisted in forming a proper view on all the above important matters. Mr. White has told us that he thinks the language of Scripture on these points is not scientific. Now I venture to differ from him, because I think there is a marvellous scientific accuracy in Scripture. Take two instances bearing upon the question before us : one is in the book of Ecclesiastes, where there is a contrast drawn between the spirit of man and the spirit of the beast ; and it is said : " Who knoweth the spirit of man that goeth upward, and the spirit of the beast that goeth downward to the earth ? " the customary inference being that man, after death, ascends to the skies, while the beast returns to its mother earth. But our best Hebrew scholars say that the word there is not " spirit " in the sense of being a part of our nature, but " spirit " in the sense in which it is used in other passages as breath. Here, then, we have a most graphic description. The breath of the beast, pumped out through its nostrils, goes down to the earth, but the breath of man ascends.

Mr. GRAHAM.—But it is more than breath that goes up to God.

Mr. BATEMAN.—Yes, we know that, when it is meant of the glorified spirit, but I maintain that in this instance it is only breath that is meant, and therefore there is nothing to interfere with the scientific accuracy of cognate passages. While I dissent very much from the metaphysical deductions of Mr. English's paper, I think it will eventually be found that he is right in this threefold distinction of body, soul, and spirit. Together they make up our present selves; but in the future state the spirit or Pneuma will exist, though I doubt whether the Psyche will, seeing that it is essentially related to our flesh and blood. But I believe that the more we examine into these things, the more perfectly and scientifically accurate shall we find the language respecting them in Scripture. (Cheers.)

The CHAIRMAN.—I will not detain you very long, but I must say a word or two before this discussion closes. I do not quite agree with the paper before us, but I should like to make some defence for it on one or two points; and whether we agree with it or not, we must admit that it has been written in a very inoffensive tone. I will not believe anything which I do not consider reasonable. We are told to give a reason for the hope that is in us, and we are rebuked for not exercising our reason and judging what is right, and I will never give up the notion that all true religion must be reasonable. As for the rationalists, as they are called, I can only say that they are not entitled to the name. In those very remarkable papers which Dr. Irons read last session on Human Responsibility, he referred to the Comptelists, who consider themselves inductive philosophers; but, as he pointed out, they do not make any induction of all the facts that relate to the Pneuma and the Psyche; but I maintain that they will in the end, be bound to take notice of many things that are not now "dreamed of in their philosophy." (Cheers.) I think that Mr. Row's gallant attack on Mr. English was not altogether opportune. We must not take our own interpretation of words that an author may use, but we must take his interpretation of them; and according to Mr. English's definition of the Psyche, he meant nothing derogatory to women, but just adduced the point that women are more religious than men, because they have less Pneuma, which leads to intellectual effort. Everybody admits the fact that there is a great difference between women under the Christian dispensation and under the old dispensation and among the heathen; and without going into Roman Catholic views about the blessing of redemption having come to us immediately through the Blessed Virgin Mary, who had faith in God's promise, and was chosen to be the vehicle for the coming of our Blessed Lord, we may think that if Adam blamed Eve for the fall, we had the redemption brought to us by Mary—the one was as blameworthy as the other was praiseworthy. But these sexual recriminations are altogether unworthy. As to the animals, Mr. English's reply to Mr. Titcomb would be that those animals have intelligence as well as affections; for he implied that they had a conscience, an intelligence, and an intellect. At least it must be admitted (he would say) that they have Pneuma as well as Psyche; but that does not, therefore, put them on a level with man. Although Mr. English speaks of

the soul dying with the body—with which I do not agree—still he believes in the resurrection of the body in a purified and different condition with the Psyche. That differs from Mr. Bateman's idea in saying that the spirit would be found in another world, and not the soul.

Mr. GRAHAM.—Mr. English's words are that the Psyche dies.

The CHAIRMAN.—And yet he believes in the resurrection of the body with the soul—his theory is not that that the soul perishes utterly. But we shall resume this subject in April, when Mr. Graham will read his paper.

The Meeting was then adjourned.

THE REV. W. W. ENGLISH'S REPLY.

I desire to make a few remarks upon two or three points in the speeches and criticisms on my paper.

The Place of Reason.—I think Mr. Row has put reason out of its proper place in regard to the Christian religion, and, if he will forgive me saying it, he has also put it out of its proper place in ratiocination when he takes my words "the Pneuma is a foundation quite incapable of bearing the superstructure which we mean when we speak of what is holy and just and good," and insists that it is a "strictly logical consequence" to say that God, being Himself Pneuma, according to my statement, would be "neither holy, just, nor good." I am not aware of any "logical" rules which justify one in reasoning from man's tripartite nature to what is true of God, the Great Spirit. I think there is one logical rule which forbids this, or rather convicts it of the charge of fallaciousness. What I maintain is that the terms holy, just, and good, as regards man, refer to what is *psychical* and *ethical* rather than *pneumatical* and *rational*, not meaning of course that Pneuma has nothing to do with holiness, justice, and goodness, but that Psyche rather than Pneuma is the *foundation* of these. The sentimental theory of conscience implies priority of feeling, not feeling to the *exclusion* of reason, in its exercise. I thought I had guarded myself sufficiently against this misinterpretation of my words in section 20, where I say "Pneuma has its part to fill, &c., but is not the *basis* of either religion or morality." Nor is Mr. Row more fortunate in convicting me of a "misquotation," for I think he quotes one passage and I another. Nor yet can I admit that my views use the ladies "badly" where I give them, psychologically speaking, their proper place. Indeed when I say they are more religious than men, because of their psychological propensities, I do them simple justice. Because St. James uses Psyche in an "unfavourable" sense, I hope Mr. Row did not mean it to be inferred that therefore the ladies, having Psyche in predominance, could not be more religious than men, as I had stated. Nor did I argue from "Adam's rib" in favour of anything distinctive of woman, but from the passage in Genesis, coupled with St. Paul's statement in 1 Cor. xi. 7—9, which has evidently escaped Mr. Row's notice. Reason, Mr. Row admits, cannot "discover everything," but contends that when God has revealed a thing "reason is the only thing that is capable of dealing with it." I deny the proposition entirely,

and will test it by the Apostles' Creed. "Conceived by the Holy Ghost," is part of its statement and is the foundation of Christianity. The Duke of Somerset has "dealt with this" part of the Creed by "reason alone," and rejected it, and my words in this paper, "faith is not the product of reason," are true enough here. But if so, Mr. Row's views of reason, as a final arbiter in matters of religion, are proved to be untenable, and, I think, destructive of Christian dogma.

Psyche, &c.—Mr. Graham says, truly enough, that God is represented as having Psyche. But he is also represented as having "hands," &c. I never meant that terms expressive of man's nature were not applied to God, but that "Nephesh is never, *like* Neshamah and Ruach, applied to God" as His proper designation. Anthropomorphic representations of God abound in both Testaments; but this is not the question. Again in saying that "the Church" adopted certain phrases, Mr. Graham objects "it is not the Church that gives us the Bible, but God." I think the Church was called out in the person of Abraham with the set purpose of giving us the Bible. The Bible came to us through the Church most certainly. I had fully answered by anticipation what Mr. Graham says about the translation of *Psyché*, but, at the suggestion of the late Mr. Reddie, it was omitted, with matter deemed to be too theological. I will not ask to have reinstated any of this, but say that I am fully convinced that the passages referred to, when fairly examined, do not militate against any position I have laid down.

The Mortality of Psyche.—Mr. Titcomb thinks my views in regard to the soul dying need protesting against. They were held by several in the Primitive Church. It is a position that I lay no stress upon. I simply adopt it as the teaching, so far as I understand it, of the Holy Scriptures. No parable can be adduced to prove the contrary of the many plain passages I have referred to. Nor do I see any other "proofs" that Mr. Titcomb has adduced, though he speaks as if there were such. There may be feeling without an "ethical capacity" most certainly, after death, as we know from the lower animals there is before death. Dives had feeling, after death, but not, I think, an "ethical capacity" for improvement. Our Lord, says St. Peter, went and preached to the spirits in prison, and, in answer to Mr. Titcomb's question, if they had not an ethical capacity, how could preaching be "of any use" to them? I reply, that supposing preaching to mean the declaration of pardon, what need of an ethical capacity for this to have effect? In section 27 I say, though probation is over and improvement impossible, "man may be pardoned; this is another and a different question," which I express no opinion upon. The text "What shall it profit a man, &c.," is dealt with in section 11. Life here and life *after* the resurrection are contrasted. Both imply Psyche of course. The intermediate state is there *passed over*. Mr. Titcomb should have noticed my reasons for saying this. I say the intermediate state passed over in this passage does not imply the existence of Psyche, and I fail to see any attempt to answer this position. Mr. Titcomb quotes this text, but does not refer to my use of it, and the reasons given for not taking his view.

INTERMEDIATE MEETING, MARCH 20, 1871.

JAMES REDDIE,* ESQ., HONORARY SECRETARY, IN THE CHAIR.

The Minutes of the last Meeting were read and confirmed, and the following elections announced :—

LIFE MEMBER :—Augustine Sargood, Esq., Q.C. (Serjeant-at law), 2, Belsize Road, N.W.

ASSOCIATES :—The Rev. Prebendary J. W. Brooks, Rector of Ponton Magna, near Grantham ; J. G. Murdoch, Esq., 1, Pall Mall East, S.W.

Also the presentation to the Library of the following books :—

“Rawlinson’s Herodotus.” 4 vols. *From John Murray, Esq.*

“The Connection between Revelation and Mythology.” By Mrs. W. Petrie.
From the Authoress.

“Important Discoveries which have led to the elucidation of the Deposit of Flint Implements in France and England.” By W. Whincopp, Esq.
From the Author.

The Rev. J. H. Titcomb, M.A., then delivered a Lecture “On some Curiosities of Ethnology.”

A discussion ensued, in which Mr. A. V. Newton, the Rev. C. A. Row, the Rev. C. Graham, Dr. J. A. Fraser, Mr. W. R. Cooper, and the Chairman took part ; the Rev. J. H. Titcomb having replied, the proceedings terminated, and the Meeting was then adjourned.

* The late.

ORDINARY MEETING, APRIL 10, 1871.

CHARLES BROOKE, ESQ., F.R.S., VICE-PRESIDENT, IN THE CHAIR.

The CHAIRMAN.—Before I ask our present Honorary Secretary to read the minutes of the last meeting, I wish to call your attention to the very great loss which we have sustained in the decease of our much respected and much regretted Honorary Secretary, Mr. Reddie. You are all aware that this Institute mainly owes its existence to his exertions. Not having been a member of the Institute at its commencement, I cannot take upon myself to assign to Mr. Reddie his particular share in its foundation; but he was one of the most influential in the foundation of this Society, and to its welfare and its interests he devoted himself most thoroughly ever since it came into existence. You all know how suddenly he was taken from us, the cause of his death being disease of the heart. He had been earnestly solicited by his medical attendant to abstain from work of all kinds, his state of health being evident, but he would not do so; he still held the labouring oar even unto the last. The great loss we have sustained has been to the Council, as I am sure it is to all here present, a source of deep regret, and I should not have done my duty in opening this meeting had I not called your attention to the subject.*

The minutes of the last meeting were then read and confirmed.

The Honorary Secretary (Capt. F. Petrie) stated that Dr. Constantine de Tischendorf had been elected an Honorary Foreign Correspondent, and read the following letter, received from him :—

“Monsieur,—“Je suis très-sensible à la communication que vous avez bien voulu me faire en votre nom et en celui du Conseil du ‘Victoria Institute.’ Le but de votre Institut est des plus nobles, et répond, ce me semble, à un besoin de notre temps. L’offre de m’y associer ne peut que m’honorer, et c’est avec satisfaction que j’accepte l’invitation d’en être un ‘Honorary Foreign Correspondent.’

“Que les travaux de l’Institut soient couronnés d’un véritable succès.

“En vous priant d’agréer vous-même et de présenter au Conseil de l’Institut mes profonds respects, j’ai l’honneur d’être,

“Monsieur, Tout le vôtre,

“Leipzig, le 30 Mars, 1871.”

“CONSTANTIN DE TISCHENDORF.

* At a Special Meeting of the Council, held 8rd April, 1871, the following resolution was adopted, and ordered to be recorded in the proceedings of the Institute :—“The Council desire to record its deep sense of the loss which the Institute has sustained in the death of its late Honorary Secretary, Mr. James Reddie, and at the same time to express the great honour with which it feels sure his name will ever be associated in its annals, not only as the Founder of the Institute, but as one who, uniting many literary and scientific attainments with untiring energy and zeal, proved eminently successful in contributing to its popularity and prosperity.”

After which, the following additional elections were announced :—

MEMBERS :—The Rev. John Robbins, D.D. (Barrister-at-Law), 'St. Peter's Parsonage, Bayswater.

ASSOCIATES :—The Rev. Canon H. P. Liddon, D.D., Ireland Professor of Biblical Exegesis at Oxford University, Christ Church, Oxford ; the Rev. Canon William Selwyn, D.D., Margaret Professor of Divinity, Cambridge, St. John's, Cambridge ; H. S. Mitchell, Esq., 135, Adelaide Road, Hampstead ; E. Poulson, Esq., 135, St. George Street East ; F. K. Shrapnell, Esq., 2, Lansdown Crescent, Stockwell.

The following paper was then read by the author :—

SOME SCRIPTURAL ASPECTS OF MAN'S TRIPARTITE NATURE. By the Rev. CHARLES GRAHAM, M.V.I.

1. **H**OLY Scripture is the revelation of the Divine will to fallen man in relation to his salvation. It comes to man as man. It addresses itself to the Jew and to the Greek ; to the wise and to the unwise. The peasant has the same interest in it as the prince ; the most unlearned as the wisest philosopher. It was not given to teach us science. Science is valuable for time ; but divine truth contemplates our highest interests both for time and eternity.

2. Parents, while they sat in the house, or walked by the way, were to teach the law of Moses to their children. Ezra, after the restoration from Babylon, read it in the hearing of all the people. Prophets spoke and wrote their inspired communications to all conditions of men. When, in some of the churches, a disposition to monopolize his epistles manifested itself, Paul enjoined that they should be read by all the members.

3. As a revelation to man as man, sacred Scripture is written in the language of the people. Its style is popular. Neither Paul nor the other writers of the New Testament employed Attic Greek, but the Greek ordinarily spoken by the people among whom they mingled. It is, to a great extent, because of its popular character that the Bible has suffered less from translation than any ancient author.

4. To look to the Bible to teach us astronomy, or physiology, is practically to mistake its divine intention. We know, for example, that the brain in man is the organ of thought ; the Bible conveys ethical and religious truth in connection with the old physiological idea that the heart, as the centre of man, is the organ of both thought and feeling.

There is only one book in the Bible which attributes the function of thought to the head. This is the book of Daniel. Daniel explained to Nebuchadnezzar "the visions of his head upon his bed." He tells us also how "the visions of his own head troubled him."

5. But as the Bible addresses itself to man's intellect, conscience, and affections, we naturally look for psychological as well as ethical correctness in its teachings. In this, we believe, we shall not be disappointed. Correct theology implies, as its correlative, correct psychology. Given by inspiration of God, all Scripture is profitable for doctrine. In following its teachings here we feel that our feet are upon the rock.

Human Trichotomy a Scriptural Fact.

6. The tripartite nature of man meets us in the Old Testament. It is, however, in the New, where the truth of revelation culminates, that it is most distinctly seen. Thus in his first epistle to the Thessalonians, v. 23, Paul prays, "And the very God of peace sanctify you wholly, and may your whole spirit, and soul, and body be preserved blameless unto the coming of our Lord Jesus Christ." In Hebrews iv. 12, the author of that epistle tells us, "The word of God is quick, and powerful, and sharper than any two-edged sword, piercing even to the dividing asunder of soul and spirit."

7. In Genesis ii. 7 we read, "The Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of *lives*—*nishmath chaiyim*—and man became a living soul." We have here an intimation of the dignity and superiority, in relation to all other earthly creatures, of that which was communicated. It was something *inspired* into man by God himself. And just as the word *Elohim* afterwards unfolds into Trinity, so this *nishmath* expands into the pneumatical, psychical, and animal. What God imparted to man at his creation we must naturally regard as having a special relation to Himself; that in which His own likeness or image chiefly subsisted. Animal life was imparted, but not animal life only. "The first Adam," Paul tells us, "was made a living soul; the last Adam, a quickening spirit." A common signification of soul, *nephesh*, in the Old Testament—a sense in which *psyche* is also used in the New—is person, oftener still, a living organic being. When it is said that Adam became a living *nephesh*, one of these is obviously the sense. In the living man were body, soul, and spirit.

8. But in the first Adam, formed from the earth, to be

sustained by it, and derive much of his enjoyment from it, the earthy and psychical preponderated. He thus stands in contrast with the second Adam, who is from heaven, and therefore pre-eminently pneumatical.

9. In connection with this contrast between the first Adam and the second the distinction between *psyche* and *pneuma* is placed in strong relief in relation to resurrection. The body is represented under the image of a seed which is sown to germinate and become fruitful. "It is sown a psychical body, *soma psuchikon*; it rises a spiritual body, *soma pneumatikon*." Here the idea of the soul is in connection with animal or bodily life; the idea of the spirit with that which is future and eternal.

10. In the development of his complex nature, we may discern man's superior rank in the scale of being. We may regard it as a rule, that, according to its intrinsic excellency, everything that lives is slow in coming to maturity. The mushroom grows up in a night; but the oak takes half a millenary to reach its perfection. There are insects which come to maturity and die in a day. The elephant is about twenty years in reaching his prime; the lion somewhat less. No animal is so long in coming to maturity as man, and none either physically or psychically can compare with him. In his lower nature we see, almost as soon as he is born, the display of a perfect instinct in the way in which he draws his aliment from his mother's breast. His senses are speedily developed by exercise; but how slowly do his reason and conscience become matured! These, however, may continue to grow while his inferior nature sinks into decay.

Materialism contradicted by Revelation.

11. Sacred Scripture gives no countenance to the idea that the soul, or spirit, in man is either a subtle form of matter or the effect of its organization. Thus our Lord, addressing His disciples after His resurrection, says, "Handle Me, and see, for a spirit hath not flesh and bones, as ye see Me have." The judgment of Paul on this point is quite evident from his second Epistle to the Corinthians. "I know a man in Christ, about fourteen years ago (whether in the body, I know not; or whether out of the body, I know not: God knoweth;) such an one caught up even unto the third heaven." Paul believed that his thinking conscious self—that in which his personality centred—could exist apart from the body. This he calls "the inner man," dwelling in the body as in a tabernacle. His desire was to put off the tabernacle, in order to depart

and be with Christ, which he judged to be far better. The same figure of a tabernacle and its inhabitant is employed by the apostle Peter. To the dying thief Christ declared, "To-day shalt thou be with me in paradise." The rich man and Lazarus die, but find themselves existing in another state of being.* On the Mount of Transfiguration, Moses, whose body had been buried in the land of Moab, appeared in glory, as well as Elijah, who had ascended in his body to the Divine presence. The language of the Evangelist is remarkable: "There appeared unto them [the disciples] Moses and Elias, talking with Him."

12. The last words of Stephen were, "Lord Jesus, receive my spirit." Having said this, "he fell asleep." The body slept, the spirit ascended to the Lord. In no part of Scripture is the spirit said to sleep when the body dies. Wherever such men as the late highly-gifted Archbishop Whately found the idea, they could never, by fair interpretation, draw it from the oracles of God. The body of the believer sleeps, to be awaked in the first resurrection; the spirit, from its nature, requires not to sleep. Literal sleep is "tired nature's sweet restorer"; but we have no reason to think that the spirit is capable of fatigue. We have, therefore, no ground to conclude that it sleeps; but rather that, when it has put off the body, it becomes increasingly active.

13. In proving to the Sadducees, from the Scriptures of the Old Testament, the doctrine of the resurrection, our Lord refers to the words spoken to Moses at the Bush: "I am the God of Abraham, and the God of Isaac, and the God of Jacob." His comment is, "God is not the God of the dead, but of the living; for all live unto Him." At that hour the patriarchs were living *unto* God, that is, living with Him.

14. Instead of the putting off of the body, in any sense injuriously affecting the spirit, the author of the Epistle to the Hebrews tells us that by faith we are come to the spirits of "just men made perfect" (Heb. xii. 23). The perfection of the spirit, which would seem to imply both purity and intelligence, is here connected with its release from the body.

15. That the spirit of man survives the death of the body seems to be either a universal instinct of our race, or a universal tradition from the patriarchs through all subsequent generations. We may not be wrong in regarding it as both the one and the other. As to its universality, we have abundant testimony. We have it in a disfigured form in the Eastern

* Though this be regarded as a parable, it must, nevertheless, teach truth.

doctrine of transmigration. The Elysium and Tartarus of Greece and Rome testify to it. In the present day, the Red Indian bears witness to it in his belief of those happy hunting-grounds in another world where his faithful dog will accompany him. When the Greenlanders see the play of the Aurora Borealis in the sky, they believe it to be the spirits of their ancestors, manifesting their happiness and joy in heaven. It is where the moral nature is exceptionally dwarfed and stunted that this doctrine is not held even among the rudest savages.

Pneuma and Psyche one in Essence.

16. Soul and spirit are ideally, not actually, separable. The mind distinguishes between them, but, in their essence, they are one. Soul and spirit can exist without the body; but the body without them is dead. The departure of the soul is a Scriptural form for expressing the dying of the body. The departure of the spirit expresses the same fact. The apostle James asserts that the body without the spirit is dead. This evidently implies that the psyche departs with the pneuma. The psyche never remains in the body to animate it when the pneuma is gone. That there is an animal life which we have in common with inferior living creatures, and which dies with the body, we do not deny, but we hope to show that this is not the rational psyche, which survives the body as well as the pneuma.

17. In our present state, the psyche cannot act without the *soma*: so neither can the pneuma without the psyche. The descending order, in which they are regarded by the apostle Paul, and in which he prays for their sanctification, is spirit, soul, body. Consciousness, we may add, is the common term which unites these three natures. Their mode of subsistence we do not undertake to explain. Just as sacred Scripture does not teach us the mode in which the three persons subsist in the ever blessed Trinity, neither does it teach us the mode of relative subsistence in the human trichotomy.

18. Though, as we have stated, distinct in idea, the terms soul and spirit are sometimes used with scarcely any difference in their signification. Thus, in Isa. lvii. 16, Jehovah says, in relation to His people, Israel, "For I will not contend for ever, neither will I be always wrath: for the spirit would fail before me, and the souls which I have made."* We have again, in the Virgin's song, a similar instance: "My soul doth magnify the Lord, and my spirit hath rejoiced in God

* *Neshamoth* has obviously here the sense of *nephashoth*.

my Saviour." It is common in Scripture to predicate that of the soul which is predicated of the spirit. In 1 Cor. xvi. 17, 18, Paul says of Stephanus, Fortunatus, and Achaicus, "They refreshed my spirit and yours." In 2 Cor. vii. 13, of Titus, he says his spirit was refreshed by them all. In Matt. xi. 28, the invitation of Christ is, "Come unto me, all ye that labour and are heavy laden, and I will give you rest." Rendered literally, it is, "I will refresh you." The word is the same which is used in the two former instances. But the question arises what is it which receives this refreshment? It is the psyche, as the next verse shows: "Take My yoke upon you, and learn of Me; for I am meek and lowly in heart: and ye shall find rest unto your souls." "Rest" here is *anapausis*, *refreshment*, from the verb *anapauo*, used in the passages cited. That it is our spiritual nature which is susceptible of divine refreshment, not our animal, it is not necessary to stop to prove. There is then obviously this spiritual nature in the psyche.

19. If the spirit is the seat of sorrow and anguish, so is the soul. At the grave of Lazarus Jesus was troubled in spirit, and wept. After this, in the prospect of the cross, we hear Him say, "Now is My soul troubled." Examples to this effect might be largely adduced.

20. The highest functions of the spiritual nature are exercised by the soul. It prays to God: "Unto Thee do I lift up my soul." It praises God and blesses man: "Bless the Lord, O my soul." The soul of Isaac blessed Jacob and Esau. It exercises faith: "My soul trusteth in Thee."

21. The spirit is the seat of intelligence: "For what man knoweth the things of a man, save the spirit of man which is in him?" But man's "rational soul" is the seat of intelligence also: "I will praise Thee, for I am fearfully and wonderfully made: marvellous are Thy works: and that my soul knoweth right well" (Ps. cxxxix. 14). "For the soul," says Solomon, "to be without knowledge it is not good."

22. "God is a Spirit"; yet in His infinitely pure essence there is soul. Thus in Matt. xii. 18, the Evangelist quotes the prophet Isaiah: "Behold My servant whom I have chosen; My beloved in whom My soul is well pleased." Here the *nephesh* of the Old Testament is *psyche* in the New. In Hebrews x. 38 we read, "Now the just shall live by faith: but if he draw back, my soul shall have no pleasure in him." It is a fair inference that, as in the Blessed God, soul and spirit are one essence, so are they in His creature man, made after His image.

23. That breath of lives—*nishmath chaiyim*—which God breathed into man's nostrils, and which constituted him, in

the concrete sense, a living soul, is elsewhere called spirit. Thus, in Job xxxii. 8 Elihu says, "There is a spirit in man, and the inspiration of the Almighty—*nishmath Shaddai*—giveth them understanding." Again, in Prov. xx. 27, "The spirit of man—*nishmath Adam*—is the candle of the Lord, searching all his inward parts. In this, I take it, is intimated the identity in essence between *nephesh* in its higher sense and *ruach*.

24. Spirit and soul are united by Paul as one in intelligence in our Christian warfare. The Philippians he exhorts to "stand fast in one spirit, with one soul—*mia psuche*—striving together for the faith of the Gospel." (Phil. i. 27.)

25. This oneness of essence between spirit and soul, in its higher signification, will receive increased confirmation as we advance in our subject.

The Relation between the Mind, Heart, Conscience, and the Soul and Spirit.

26. The word "mind" (*nous*) occurs twenty-three times in the New Testament, and always implies understanding or intelligence. It is employed in relation to the Divine intelligence as well as the human. It is predicable, as we have just seen, both of the *pneuma* and *psyche*, and so furnishes another evidence of their essential unity. In several instances, our translators have rendered the *psyche* of the New Testament by what they regarded, from the context, as its equivalent—*mind*. See Acts xiv. 2; Phil. i. 27.

27. The term "heart" (Heb. *lêv*, Gr. *kardia*) is almost invariably employed in Scripture in a moral sense. It is a generic word.

(a) It is a name for the affections, more especially for love. "Thou shalt love the Lord thy God with all thine heart." "My son, give me thine heart."

(b) Intelligence is also ascribed to it. Hence the understanding heart given to Solomon. "I also," says Job, "have understanding (*lêv*) as well as you" (Job xii. 3).

(c) It is used for the *will*—the power which chooses and determines. "To destroy is in his heart" (Is. x. 3). "The day of vengeance is in my heart" (Is. lxii. 4).

We shall see by-and-by that it is also used synonymously with conscience.

28. No creature adorns the body but man. In all ages the fair sex, that needs adorning least, has practised it most. To these the apostle Peter addresses the exhortation, "Whose adorning let it not be that outward adorning of plaiting the hair, and of wearing of gold, or of putting on of apparel: but let it be the hidden man of the heart . . . the orna-

ment of a meek and quiet spirit." (1 Peter iii. 3, 4). Here the spirit is recognized as the seat of grace, the centre of man's being, and is used synonymously with "heart."

29. But from the uses of the word "heart," which we have noticed, it is not necessary to spend time in proving what is apparent, that it is essentially the same as "spirit." What is of more importance is to show that it is used interchangeably with "soul." Here I think the proof is satisfactory. In Eph. vi. 5, 6, we have the apostolic command, "Servants, be obedient to them that are your masters according to the flesh, with fear and trembling, in singleness of your heart—*kardia*—as unto Christ; not with eye-service, as men-pleasers; but as the servants of Christ, doing the will of God from the heart." Now the latter word "heart" here is not *kardia*, it is *psyche*. Our translators have given the true idea. In *psyche*, in this place, are implied all the elements of *kardia*—love, intelligence, will, conscientiousness.

30. In Col. iii. 23 we have a similar instance. "And whatsoever ye do, do it heartily, as to the Lord, and not unto men." Here again the word is *psyche*, but containing all the attributes of *kardia*. The inference is obvious: things which are equal to the same are equal to one another. While we may freely admit that, in the terms of a language, this principle will not rigidly apply, as perhaps no two words are absolutely synonymous; yet they apply so far as to prove that *psyche* and *pneuma* are essentially one.

31. Conscience (*suneidēsis*, *conscientia*) is a term of the New Testament. In its active aspect it is our moral judgment, the state of the mind censuring or approving its own acts or condition, or both. It is called by many philosophers "the moral sense." This denomination does not apply to the pain or pleasure felt upon its exercise. These are effects produced by it, not constituents of itself. It is a "moral sense" in relation to the instinct or impulse which causes its judgments, and, as a consequence, impels us to, or restrains us from, action. To this moral instinct or sense Paul seems to allude, when he speaks of those who had their conscience canterized.

32. If we regard conscience with some as simply the moral judgment which the mind pronounces on its actions, as in harmony, or otherwise, with the moral relations in which we stand, its root will be in our ethical and religious nature. If we regard it more as a function or faculty of the mind, it will be mainly, if not altogether, that nature itself.

33. If we except one passage (John viii. 9), which is of very doubtful authority, the word conscience is never used by

the apostle John. He employs instead of it the word "heart." "If our heart condemn us," and "if our heart condemn us not," are his expressions for the approbation and disapprobation of conscience. It occurs about thirty times in the New Testament, and in twenty-one of these is used by the apostle Paul. If we accept this apostle as the author of the epistle to the Hebrews, he is the only New Testament writer who uses the word, except the apostle Peter, who employs it three times.

34. Conscience, though shared by the psyche, is mainly, as we hope by-and-by to show, the great organ of the pneuma.

35. Conscience, from its etymology, implies the knowledge of a divine rule; then that such and such acts agree with or contradict that rule. In Rom. ii. Paul shows that the heathen have that rule in nature. The eternal power and divinity of God, he affirms, are apparent from the things which He has made. Without a rule the human mind can form no judgment. Hence it is that conscience, to be a correct guide, must itself be instructed by an infallible standard. It is only safe to follow it when it is divinely enlightened. Some of the worst deeds that ever disgraced humanity have been done by its promptings. "The time will come," said Christ to His disciples, "that whosoever killeth you will think that he doeth God service." The rivers of righteous blood which have flowed in Christendom, in the name of conscience and of God, are a comment upon these words. Follow conscience, however, we must; hence our deep responsibility to have it enlightened from the infallible fountains of knowledge.

Pneuma the Possession of Universal Man.

36. I am not aware that any believer in Revelation denies that every man possesses a soul. If our previous citations be apposite, and our reasonings just, it is equally evident that every man possesses also a spirit. But as this is denied by some, it may be well to establish it by distinct testimony.

37. The doctrine of not a few, in the present day, is that while man by nature possesses a soul which is mortal, he only receives a spirit, which is immortal, when he is born again. This, I am bold to affirm, is neither the psychology nor pneumatology of sacred Scripture.

38. To affirm that any man possesses not a spirit, in the sense in which we have hitherto, in this paper, employed the term, and the sense intended by those with whom we join issue, is, we submit, to deny his proper humanity. The pneuma

is a part of humanity. It existed in Adam. Any of his descendants who possesses it not is not a man: he wants the main constituent of humanity.

39. We have already shown that, though we understand not their mode of subsistence, soul and spirit are inseparable; one in essence, however distinct in idea. To possess a rational soul is therefore to possess also a rational spirit.

40. One of the titles by which Moses and Aaron, when pleading for Israel, on the rebellion of Korah, address Jehovah, is "The God of the spirits of all flesh" (Num. xvi. 22). On this relationship they base their plea and prevail. In the same book (xxvii. 16) we have again, in the lips of Moses, the same expression. Compare this with the words of Elihu (Job xxxii. 8), "There is a spirit in man," that is, in man as man. Spirit is an integral part of his being. That this is the meaning, the sentence, when finished, makes sufficiently clear. "There is a spirit in man: and the inspiration of the Almighty giveth THEM understanding."

41. On this point the language of the New Testament is equally clear. It recognizes spirit as a part of our humanity. "What man," asks Paul, "knoweth the things of a man, save the spirit of the man which is in him?" "The spirit of the man" is surely a part of himself. Paul delivered the incestuous Corinthian to Satan for the destruction of the flesh, that his spirit might be saved in the day of the Lord.

42. If the spirit is something divinely given in regeneration, it is holy, and needs not to be saved. The spirit of this man needed salvation. We infer, therefore, that it was a part of his own fallen humanity.

43. That spirit is not something breathed into man at his conversion, but an original part of himself, is evident from the Apostle's prayer for the Thessalonians: "And the very God of peace sanctify you wholly"—*holoteleis*, in reference to the three departments which follow—"and may your whole spirit, and soul, and body be preserved blameless unto the coming of our Lord Jesus Christ." The words *holoklēron humōn*, in which *pneuma*, *psyche*, and *soma* all participate, greatly strengthen my argument (1 Thess. v. 23). The spirit is "your spirit" just as much as the soul is "your soul," or the body "your body." As a part of fallen human nature, it needs sanctification, and when sanctified, requires, like the soul, to be kept from sinning.

The Rational Psyche survives the Dissolution of the Body.

44. It is clear that if we have established the essential

union of the rational psyche and the pneuma, their coeval existence, as a consequence, will follow: the pneuma surviving the body, the rational psyche will also survive it. But on this point we have the distinct teaching of Scripture.

45. It is important to notice that *nephesh* and *psyche*, as well as *ruach* and *pneuma*, are employed, in Scripture, in various low significations. In Num. vi. 6, *nephesh* stands for the mere animal frame when the life has departed—*nephesh mēth*.

46. In several other places *nephesh* by itself is the dead body. Again, it is put for desire: "He enlargeth his desire (*naphsho*) as sheol." (Hab. ii. 5).

47. But a very common use of *nephesh* in the Old Testament, and *psyche* in the New, is life—life whether in man or the lower animals. They are also used in both applications as concretes.

48. But *nephesh* and *psyche* are also unquestionably used in a high spiritual sense. We cannot consistently regard *nephesh*, in such places as the following, as mere animal life. "Lay up these words in your soul" (Deut. xi. 18). Elisha prays, "Let this child's soul come into him again" (1 Kings xvii. 21). In the view only that the idea of soul here contains within it that of spirit is this prayer reasonable; for "the body without the spirit is dead." "Set your soul to seek the Lord." Here in "soul" is contained the idea of the intelligent mind. "The law of the Lord is perfect, converting the soul." "The redemption of the soul"—which is surely more than the perishable life—"is precious." "Rejoice the soul of thy servant." "For the soul to be without knowledge it is not good." "Hear, and your soul shall live."

49. When, in the New Testament, it is said to the rich fool, "This night shall thy soul be required of thee," more is meant than that his animal life should perish. It contains the more deeply solemn idea of the soul returning to God to render an account of his abused trust. When Paul and Barnabas, in Lystra, Iconium, and Antioch, confirmed the souls of the disciples, it surely does not mean that they strengthened their animal life. Reason and faith are here regarded as dwelling in the soul.

50. The converse of this ministry, when Judaizing teachers subverted the souls of the disciples, contains the same ideas. When Paul calls God for a witness upon his soul, he appeals both to his intelligent purpose and conscientiousness. Hope is the anchor of the soul—not surely of the animal life. That could neither understand the hope of the Gospel nor be comforted by it. We believe to the saving of the soul, not surely

to the saving of the animal life. He that converteth a sinning brother from the error of his ways shall save a soul from death, and shall hide the multitude of sins which that erring one hath committed. When the apostle John prays that Gaius may prosper and be in health, even as his soul prospers, the soul is contemplated as possessed of both grace and intelligence. *Soul*, we have seen, belongs to the Blessed God Himself. One inference, we think, is clear, that if "soul" is used in Scripture for the mere animal life, it is also used in a sense which implies the mind and spirit.

51. Any argument drawn against the immortality of the soul, because the word is used in Scripture for life, lies equally against the immortality of the spirit. In Eccles. iii. 19, beasts and men are said to have one spirit (*ruach*). In ver. 21 it is asked, "Who knoweth the spirit of man that goeth upward, and the spirit of the beast that goeth downward to the earth?" Again the word used is *ruach*. *Nephesh* and *ruach*, *psyche* and *pneuma*, and the Latin *animus* and *anima*, have all one radical idea, that of breath or wind, all seeming to carry in them a memorial of the revealed fact, that God at the first breathed into man the breath of lives.

52. Conceding that many inferior animals possess a measure of intelligence, still it is clear that in them an unreasoning instinct is in the ascendant. The soul of man, in the sense in which we contemplate it, while distinguished by a moral and religious nature, is also separated from that of the beast by reason. In him reason holds the higher place; instinct the lower. Reason is the great instrument by which he maintains his lordship in creation. The Arctic fox stores up provisions for the winter. Instinct is to him a safer guide in this respect than reason to the Esquimaux. Nevertheless the Esquimaux, defectively developed as their reasoning faculty is, are sovereigns over him and all other creatures in the regions in which they live.

53. The inferiority of instinct to reason is seen in the tame beaver, which will build a dam in the corner of a room, with brushes, fire-irons, and books, and then sit down behind it. Reason, in its higher sense, is peculiar to the human soul. It is "that power which it has of deducing universal truths from particular appearances, or of contemplating the ideal relations of things." Hence the human soul, in this lower creation, stands peerless.

54. The rational soul is a magazine in which knowledge can be stored almost without limit. But it is more; it is a living plant, whose nature is to grow, to bud and shoot out in all directions. The soul of man is naturally curious and

observant. It compares ideas, reflects on them, reasons, and draws its inferences. It is always receiving accessions to its knowledge, and always turning them to account. It can do what is beyond the power of any inferior creature; it can bring its ideas to the test of first principles, or compare them with those of other minds.

55. That this rational soul survives the body is, we think, a distinct doctrine of Revelation. "Be not afraid of them that kill the body, but are not able to kill the soul: but rather fear Him who is able to destroy both soul and body in hell" (Matt. x. 28). The plain meaning here is that the body may be killed, that is, the animal soul or life may be destroyed, but the rational soul cannot. We are to fear Him, who shall yet make the resurrection body the dwelling of the soul, and can then cast both into Gehenna. Let it be observed that nothing is here said of the spirit. This evidently implies that the spirit, as we have shown, is included in the soul.

56. When the fifth seal was opened, John saw under the altar, "the souls of them that had been slain for the word of God, and for the testimony which they bore: and they cried with a loud voice, saying, How long, Thou Master, holy and true, dost Thou not judge and avenge our blood on them that dwell on the earth?" (Rev. vi. 9, 10.) Here we have an exemplification of the words of our Lord in Matthew's Gospel. Men had slain the bodies of these martyrs, but could not kill the soul. The soul lives, cries for vengeance, receives the divine response, and, in the gift of white robes, a token of the Divine approval. These are the same souls whom John sees, in chap. xx., living and reigning with Christ for a thousand years.

57. If we have succeeded in proving the soul and spirit, though distinct in idea, to be one in essence, then it follows that the soul of Lazarus, after death, passed away to the bosom of Abraham; that Abraham's soul and his, had fellowship; and that it was the soul of the rich man, as well as his spirit, which went to the place of torment. It will also follow that the soul of Moses was on the Mount of Transfiguration.

The Source of our Ethical and Religious Nature in the Pneuma.

58. "God is a Spirit." This very fact suggests that it is spirit in us which apprehends and enjoys Him. So we find it in His word. To our spirit He reveals Himself. The life which He imparts to us in our fallen state—a state described as a "death in trespasses and sins"—is spiritual life. Of *spiritual* life spirit is the natural recipient. The Divine Spirit

takes His denomination "Holy Spirit" from His office as Sanctifier. It is natural to conclude that the department of our nature in which His agency is more immediately exercised, is that which resembles His own. "That which is born of the spirit is spirit." Regeneration begins in the pneuma, but extends to the psyche. Its effect is felt by the intellect and affections, which are brought under the control of the renewed pneuma. Between the holy soul and its Redeemer there is a unity of nature and life: "He that is joined to the Lord is one spirit." He dwells in God, and God in him.

59. That our spirit is the seat of the religious consciousness, is the direct teaching of Paul in Rom. viii. "The Spirit Himself beareth witness to our spirits that we are the children of God."

60. No man needs a divine quickening to make him active in a psychical sense; to make him pneumatical he needs the quickening of the Holy Spirit. When renewed in "the spirit of his mind," that is, made spiritually-minded, his condition, the apostle tells us, is that of "life and peace." It is in the pneuma, where the faculty of "God-consciousness," as it has been forcibly called by Heard in his book on man's tripartite nature, resides, that man is in that morally torpid condition which Scripture calls death. Men without the renewing of the Divine Spirit may possess the dread of God; but love to God, childlike affection and confidence, they possess not.

61. That divine grace is regarded as dwelling in the spirit may be seen from such passages as these: "That the righteousness of the law might be fulfilled in us, who walk, not after the flesh, but after the spirit." "They that are after the flesh do mind the things of the flesh; and they that are after the spirit, the things of the spirit." "The flesh desires against the spirit, and the spirit against the flesh." The Psalmist pronounces the man blessed in whose spirit there is no guile. His prayer for himself, on the remembrance of his great sin, is, "Create in me a clean heart, O God, and renew a right spirit within me." Exercise and cultivation will improve our intellect and bodily powers; but holy Scripture teaches us that the pneuma in us can only be quickened and raised to the enjoyment of God by His Holy Spirit. To enjoy Him we must resemble Him, and it is the office of His Spirit to make us like Him. The natural conscience of the pneuma may condemn sin, but it has little power to hold back from its commission. It may approve the right, but it wants strength to propel us onward in the path of duty.

62. Disease in the body follows lowness of the vital power.

Thus has the deadness of the pneuma been followed by moral and spiritual disease in our entire inner man: the *sarx* and the *psyche* prevail over the pneuma. Renewal in the spirit of the mind removes the pride of the intellect, and gives it a God-ward direction. It then falls in with the pneuma to control the lower appetites of the flesh.

63. "Rex noster est animus." Let *animus* here stand for the pneuma, and we have a fact of the first importance, a key which unlocks the mystery of our condition. The sceptre has fallen from the monarch's hand—hence the anarchy of the kingdom—the servant is on horseback, and the prince walks on the earth. In the pneuma the Holy Spirit finds an innermost sanctuary in man. When He takes possession of this, His power and purity are felt through the whole of man's tripartite nature.

64. That the pneuma is the *sanctum sanctorum* in which the Divine presence dwells is the beautiful idea of Luther. Now, it was this presence which made both the holy place and the court sacred. We have in this, moreover, a striking illustration of the essential unity of the pneuma and the *psyche*. The holy and most holy places were one building. Both were surrounded by the court, in which they appeared to reside, as the *psyche* and pneuma in the human body.

65. Moreover, the holy place was the medium of access from the court to the most holy. It thus connected the court and the most holy place together. It is thus the *psyche* seems to stand as the connecting link between the *soma* and the pneuma. It is of the essence of the pneuma, yet mixes itself up with the animal appetites and affections of the *soma*. But we do not, in any sense, regard it as dying with the animal life of the *soma*. Animal life in Scripture, as in modern physiology, is connected with the blood; the rational *psyche*, being of the essence of the pneuma, is unaffected by its death.

66. The animal life with its appetites and passions, often called *psyche* in Scripture, is distinguished from the rational or higher *psyche* by the apostle James. "The double-minded man," he says, "is unstable in all his ways" (James i. 8). This, in the Greek, is *dipsuchos*, double-souled. This, by Alford, is interpreted, "one soul drawn upward to God, the other drawn downward to the world." We find the same word afterwards in an address to rich oppressors and persecutors: "Cleanse your hands, ye sinners; and purify your hearts, ye double-souled" (James iv. 8).

67. "The spirit of a man," Solomon tells us, "is the candle of the Lord, searching his inward parts" (Prov. xx. 27). Now

it is conscience which searches, and pronounces its judgment on our inward moral state. Enlightened "by wisdom from on high," conscience is the candle of the Lord. Man's spirit is here said to do what it is the office of conscience to do. Is not the inference clear: conscience is the organ of the spirit?

68. It is by the pneuma that God is worshipped. "They that worship Him must worship Him in spirit and in truth." "We are the circumcision," says Paul, "who worship God in the spirit." Again, "Whom I serve with my spirit in the gospel of His Son." The faculty by which we worship God is that by which we know Him. We can only worship Him as He reveals Himself to us. It was in spirit David called Christ Lord, because it was to his spirit He was revealed.

69. It is remarked by Heard, in his book already referred to, that, while there is the same relation between nephesh and ruach in the Old Testament as between psyche and pneuma in the New, with the progress of Divine Revelation these latter words acquire a deeper signification. This is specially true in relation to the pneuma. This deeper signification is, perhaps, most apparent in the use of the adjective *pneumatical*. Gifts for proclaiming and expounding New Testament truths are *pneumatical* gifts, as coming from the Divine Pneuma and being received by the pneuma in us. By these *pneumatical* gifts we "sow *pneumatical* things." The law is *pneumatical*, because it acts upon the conscience of our pneuma. The *pneumatical* man, because of the divine illumination of the pneuma, judgeth all things. Hence, says Paul to the Corinthians, "If any man thinketh himself to be a prophet, or *pneumatical*, let him acknowledge that the things which I write unto you are the commandments of the Lord." The blessings of salvation, as received by the pneuma, are *pneumatical* blessings; and the comprehension of them *pneumatical* understanding.

70. The songs of praise, which are acceptable to God, are *pneumatical* songs sung by the pneuma. Those qualified to deal with the conscience of one surprised by temptation, and to restore him, are *pneumatical* men.

71. All this testimony to the fact of the conscience and moral nature being in the pneuma is strengthened by striking contrasts. The *psychical* man, in the New Testament, is the unrenewed man, in opposition to the spiritual or renewed. "The *psychical* man receiveth not the things of the spirit of God: for they are foolishness unto him: neither can he know them, because they are spiritually discerned." The wisdom from beneath, as opposed to that which comes from above, is

“earthly, psychical, devilish.” The scoffers and persecutors, described by the apostles Jude and Peter, are “psychical, having not spirit.” They are shown not to be devoid of reason, but the pneuma has never been quickened or renewed.

72. We may, at this point, pause to draw another inference, which will strengthen previous reasoning, that the human trichotomy, in its broad general features, consists of the animal, the rational, and the spiritual.

73. We are here prepared for another observation, by way of inference, that while pneumatically we may grow rapidly—make great progress in spiritual-mindedness—there may be no rapid growth in the strength of the understanding or reason. No one will, I think, deny that many who are remarkable for true Christian devotedness, by no means excel others in the acuteness or strength of their intellects in relation to the things of this life. In the region of spiritual truth it is different.

74. Man is the only religious being in the world, not because he alone possesses intelligence—a lower form of this belongs to some other creatures—but because in his pneuma there is a conscience and moral nature. To place the moral nature in the psyche is to exalt the psyche above the pneuma, which, as we have seen, is contrary to the teaching of Scripture. Much less can we regard the psyche as perishable; for then our moral nature, if lodged in it, would perish also. Another consequence, too, would follow: for, if the receptive faculty of divine grace is lost, the grace itself, if not wholly, must, to a great extent at least, be lost with it. But we trust what has already been said on this point will be regarded as decisive.

75. This paper would be incomplete without a few words on the Pauline distinction between the present soma psychikon and the future soma pneumatikon of resurrection. It is not the Divine intention that the pneuma and psyche should permanently remain without their appropriate soma. Hence the Apostle declares that, “If our earthly house of this tabernacle”—the present soma psychikon—“be dissolved, we have a building of God, a house not made with hands, eternal in the heavens.” The present body is a tent; the future will be a permanent dwelling. Putting off this tabernacle, he calls unclothing. This was not the goal of his hope, but to be clothed with his house from heaven. This, then, is the character of the soma pneumatikon, it is a house from heaven. The body falls a house of clay, but out of it will be raised a celestial, spiritual building.

76. In the New Testament we have the resurrection of the

soma, never of the sarx. In the Old Testament we have an allusion by Job to the resurrection of the *basar*, or flesh, by which we are evidently to understand "the body," a meaning which the word often bears.

77. "Flesh and blood cannot inherit the kingdom of God," for the reason that corruption cannot inherit incorruption. From the resurrection body the entire nutritive system shall disappear. "Meats for the belly, and the belly for meats; but God shall destroy both it and them." The nutritive system implies the circulation of the blood, by which the body is nourished, and that which is nourished—flesh. All these shall be absent from the soma pneumatikon. There will be no repair, as there shall be no waste.

78. Paul's beautiful and striking image of resurrection is the corn of seed sown in the earth. "Thou sowest not," he says, "the body that shall be, but a bare grain of wheat, it may be, or of some other grain." The following words are noteworthy:—"God giveth it a body as it hath pleased Him." The body then which we lay down in the grave is not the body that shall be. Out of it God will give, or raise up, a body as it pleases Him. "It is sown in corruption; it is raised in incorruption: it is sown in dishonour; it is raised in glory: it is sown in weakness; it is raised in power; it is sown a psychical body; it is raised a pneumatical body."

79. "The most sublime efforts of philosophy," says Gibbon, "can extend no further than feebly to point out the desire, the hope, or at most, the probability, of a future state." As to the resurrection of the dead, the philosophers of Greece and Rome had no idea. When Paul preached it in Athens they turned the doctrine into ridicule. Their belief, or rather their unbelief, on this grand doctrine of Revelation, is expressed in the mournful utterance of Moschus on the death of Bion:—

"Our plants and trees revive, the breathing rose,
With annual youth, in pride of beauty glows;
But when the master-piece of Nature dies,
Man, who alone is great, and brave, and wise,
No more he rises to the realms of light,
But sleeps unwaking in eternal night."

Compare this with the words of the Apostle, and how great is the contrast! "The trumpet shall sound, and the dead shall be raised incorruptible, and we shall be changed." Taught by these infallible oracles, we know incomparably more than heathen philosophy could ever attain to: "We look for the resurrection of the dead and the life of the world to come."

The CHAIRMAN.—I am sure we all join in giving our most hearty thanks to Mr. Graham for this admirable paper. (Hear, hear.) I shall now be glad to hear any remarks that those present may desire to make upon the subject.

Rev. J. JAMES.—I agree with our Chairman that we ought to offer our best thanks to Mr. Graham for his paper. It contains some admirable passages, some of which are most eloquent and most true, such as that in the 10th section, which speaks of the various growths of God's creatures, and that in the 16th section, which deals with the soul and the spirit. But at the same time, there are two or three points which have struck me in connection with this paper, and in regard to which I cannot altogether agree with Mr. Graham; and I should like to throw them out for general consideration:—First of all, I think the title of Mr. Graham's paper is at variance with his argument, which favours a quadrupartite rather than a tripartite division of man's nature. Besides the body, Mr. Graham speaks of the animal soul, or that which we have in common with the brute creation; and then of the rational soul, which is something quite distinct from the animal soul, and also distinct from the spirit. There are, therefore, four parts of man's nature distinctly and elaborately described in this paper, with the exception of the first part, or body, of which very little is said, that being seemingly, for the most part, taken for granted as the basis of the human being. The body, soul, and spirit are the three parts spoken of by the apostle,* and that gives us a tripartite division; but here we have the body, the animal soul, the rational soul, and the spirit; or a fourfold division. It appears to me to be one of the great faults of the paper that its argument really tends to a quadrupartite, and not to a tripartite division of man's nature. Then there is another reason why I think it would have been better to have had a different title for the paper; because it is one of which the main tendency is to show that in the Holy Scriptures, both in the Old and New Testaments (with the exception, perhaps, of the writings of St. Paul), that canon is always followed with which Mr. Graham commences his third section:—

“As a revelation to man as man, Sacred Scripture is written in the language of the people. Its style is popular.”

The paper might almost have been entitled “An Argument to show that in the Scriptures the uses of the words ‘Soul’ and ‘Spirit’ are Popular Uses, and not Scientific, except in the writings of St. Paul.” The same may be said with regard to the word “heart.” There are elaborate passages in this paper to show that *nephesh* and the other Hebrew words, and *ψυχή* and *πνεῦμα*, and

* 1 Thess. v. 23. “All animals have the body, all the living soul (Gen. i. 20, 21); but the breath of life, breathed into the nostrils by God himself, is said of man alone. Cp. ‘the body, soul, and spirit,’ of ancient philosophy and of the Apostle Paul.”—Bp. Harold Browne.—ED.

the word "mind" also, are all used in a popular sense throughout the Bible, except where such words are used by St. Paul. That is what the paper really shows; not that the immortal spirit and the soul are identical or equivalent, but that they are common terms in the Bible, and are both used for one common substance, namely, the spirit. Of course I use the word "substance" in a philosophical sense. I confess that my own view of the subject, to go to the root of matter at once, is that the spirit of man alone will animate his body after the resurrection;* and that, as has been shown by a very able passage in the paper, the soul—the animal soul—will not survive after the resurrection. St. Thomas Aquinas is very clear upon the point that the body, at the resurrection, will be animated no longer by the soul of the flesh, but by the spirit alone. In short, this paper of Mr. Graham's only proves the unphilosophical character of the language of Holy Scripture. In popular language, man consists of two parts, soul and body; so entirely in popular use is the word "soul" used for spirit, that it was so used almost universally by the writers of the Old and New Testaments. But St. Paul, having a more methodical and systematic mind, expresses the difference distinctly and clearly in every passage. Indeed, I would undertake to show that in every passage that could be brought forward, where he uses the word "soul," he speaks of the animal soul. For example, in the 29th section of the paper, Mr. Graham has referred to the passage from the Epistle to the Ephesians, and pointed out that in the words translated "doing the will of God from the heart," the last word is *ψυχῇ*, and not *καρδίᾳ*, yet equally expressive of the operation of the animal soul, as distinct from the spirit or rational soul. Now the dog is the most faithful servant to the man who has found out and secured its affections; there is nothing that it will not do for its master, it is always on the look-out to fulfil his wishes, as expressed either by the eye or in any other way, and having found a protector and a friend in its master, it makes no attempt to gain any other friend, but looks to him as its one source of happiness, and does everything it can for him out of its heart—in fact, *ἐκ ψυχῆς*. The dog is capable of performing great services, and doing marvellous things for its master, its instinct rising almost up to the level of reason. In the same way, the affections of the heart and the energized powers of the body enable men and women to carry out into action the feelings within them; and St. Paul uses the phrase *ἐκ ψυχῆς* in this place to show that the Christian's obedience is to be so completely a part of his being as to partake of the character of instinct—pervading his whole soul-animated body. It is just a parallel case to the use of philosophical terms. We all understand the fact that the sun does not go round the earth, and

* See 1 Cor. xv. 44. "It is sown a natural body [*σῶμα ψυχικόν*], it is raised a spiritual body [*σῶμα πνευματικόν*]."

does not rise or set ; but we constantly use the phrase “ rising ” or “ setting ” as applied to the sun—we cannot help it, it is the popular language which we are always using ; but when we use philosophical language, we attach totally distinct meanings to our terms. In concluding my observations, I should like to quote one passage from Juvenal, which is very clear and distinct. I only quote it to show that a tripartite division of man’s nature is one that may be received and maintained against all comers. He says (I will not quote the original Latin) :—“ In the beginning of the world, the common Creator endowed them ”—the beasts that perish—“ only with *animam* (a soul) ; but to us He gave *animum quoque* (a mind also), in order that we may be able to fulfil our destiny in governing the other creatures of the world.” (Cheers.)

Mr. S. HANSON.—As a stranger, I may perhaps be permitted to offer a few observations on this subject, and I will endeavour not to transgress the ten minutes’ limit which I understand is imposed upon all the speakers here. I agree, upon one point, with the gentleman who has just sat down, for I think there is some confusion of thought in Mr. Graham’s paper. With some parts I do most cordially agree, but I as cordially dissent from others. I agree with the tripartite division of man’s nature, and I wish Mr. Graham had kept strictly to it ; and also to the fact that this tripartite division is common to our human nature, and not applicable merely to regenerate man. But I totally disagree with the manner in which Mr. Graham has mixed up the soul and spirit in the course of his paper, assuming in many of the cases that they are used indifferently. In the third place, I altogether dissent from what he has said about the heart. While I agree most thoroughly in the tripartite division of man’s nature, and believe that it can be well sustained and established by the Scriptures, I do not think that any of the philosophers of old maintained such a theory. By the light of the Scriptures, and especially of the New Testament, the doctrine is brought out most clearly, and St. Paul distinctly enunciates it, not only in that single passage in the fifth chapter of the First Epistle to the Thessalonians, where the three parts are combined—“ your whole spirit, and soul, and body ”—but in several other places, and particularly in the second chapter of the First Epistle to the Corinthians. It is in that second chapter, especially, that the important point which has been ignored by Mr. Heard in his able book, is given, that every man has a spirit in him which is part of his constituted nature :—

“ For what man knoweth the things of a man save the spirit of man which is in him ? even so the things of God knoweth no man, but the Spirit of God.”

Now that is a most important point in the teaching of St. Paul, because by Mr. Heard’s view, that the spirit died at the Fall, and that man thenceforward consisted only of body and soul, he necessarily relegates the intellect of man to the soul, which I believe to be distinctly contrary not only to the teaching of the New Testament, but also of the Old.

MR. GRAHAM.—Mr. Heard duly contends for the torpidity of the spirit. He does not hold that it perished at the Fall.

MR. HANSON.—In different parts of his book Mr. Heard applies the terms “dormant,” “dead,” and “unborn,” to the spirit.

MR. GRAHAM.—He uses the words “dormant” and “dead” in the same sense.

MR. HANSON.—I have frequently talked the matter over with Mr. Heard, and he does relegate the power of discernment to the soul or to the rational soul. Here, again, I feel bound to say that it is most unscriptural to speak of the animal soul and of the rational soul. It is a distinction of the schools, as may be seen by any one who refers to Bishop Ellicott's discourse. In the fourth sermon, in his volume called “The Destiny of the Creature,” the bishop gives an historical account of the annihilation, if I may so say, of the doctrine of the spirit in the fourth and fifth centuries, on account of the doctrine of Apollinarius. There is the fact that the “rational soul” was a term employed in those days, and especially by Augustine. It was brought into the Athanasian Creed in the words “of reasonable soul and human flesh subsisting,” on account of the entire banishment of the spirit as a part of man. But in this paper of Mr. Graham's there is some confusion ; because, on reading it over carefully this afternoon, and in following Mr. Graham's reading of it to-night, it seemed to me that if his view be correct, we might to all intents and purposes just as well have the popular division of soul and body only. But I maintain, and, were there time, I think I could prove, that there is abundant scriptural testimony to show that in no place have the two words translated “soul” and “spirit” a synonymous meaning. I have gone carefully into this subject, examining every passage where the words *ruach*, *neshamah*, and *nephesh* occur in the Old Testament, or $\psi\upsilon\chi\eta$ and $\pi\nu\epsilon\upsilon\mu\alpha$ occur in the New : and I believe that the Spirit of God has carefully preserved the two words as entirely distinct ; and I know of no single instance to the contrary, not forgetting the song of the Virgin Mary, where, as I believe, the fact that the two words are both used, shows that there is a distinctness of meaning between them. It is indeed most important in considering the tripartite nature of man, that we should preserve the distinctness of the soul equally with the distinctness of the body, or of the spirit. There is another point in the paper which I also strongly protest against, and that is the phrase “the essential unity of the two.” I do not believe it can properly be said that there is an essential unity. Of course it is a very difficult thing to know how to express this, because in the same sense that we should assert the essential unity of the Deity—of the Three in One—there is essential unity in these two terms ; but just as there is a perfect distinctness of person and of office in the Father, the Son, and the Holy Ghost, in the same manner, if not in the same degree, do I see the perfect distinctness of the spirit and soul and body. Also I totally dissent from the idea that the soul will not be found in the raised man, whether saint or sinner ; because with regard to the persons of whom Paul, in his Epistle to the Thessalonians, was alone speaking, you read that

they are to have their whole spirit and soul and body preserved unto the coming of our Lord Jesus Christ. The spirit, and soul, and body are to enter into the consummation of bliss.

MR. GRAHAM.—I contend for that in my paper.

MR. HANSON.—Now Mr. James contended that the soul would have no part in the future man, whereas I say that the spirit and soul and body each formed part of man as originally created in the image of God, and that they will remain the constituent portions of man to all eternity. I have no time now even to allude to the heart, but I protest against the contrast of the heart and the head, which is, of all modern errors, the most popular, and the most decided; because, in the Scriptures, the heart is always used for the inner man, as opposed to the *πρόσωπον*, or outer man, and the heart includes the spirit and soul, or, in fact, the whole of the inner man. There is no difficulty in understanding what it means, especially in that passage in the third chapter of the First Book of Kings, where Solomon prays for an understanding heart that he may discern between good and evil. There is no doubt or difficulty in the scriptural use of the word heart—it always means the entire inner man, having reference more or less to the affections or to the thoughts, but always meaning the inner man; and I say to all who have not gone deeply into this subject, that it would amply repay their study. I believe this is the most practical question in the theology of the day, and that many questions, which we now dispute, will not be settled until we turn to the scriptural development of man's nature, and abandon that wretched Augustinian statement that man consists only of soul and body. And now allow me to make one more remark in reference to the soul. I see very plainly that soul, like spirit, is not always used in the same application, and I hope I may be permitted to illustrate this by a familiar instance from the Gospel of John. In chap. iii. 6–8, our Lord not only asserts the spirit of man in its relation to the Spirit of God, but illustrates it by the wind—*τὸ πνεῦμα πνεῖ*. Here we get three applications of the same word, having one root-meaning. There is a passage in Olshausen's *Opuscula Theologica* (which contains an important paper on this subject), where the author says that the meaning of scripture words is very rarely multiform, and that we should ascertain the one true signification, and then we would be able to show in what various modifications that one meaning might be applied. In another passage from Horne Tooke, which Richardson quotes in his Introduction, it is said that "a word has one meaning, and one only; from it all usages must spring; and from it, underlying in its depths, must be found its intrinsic meaning in case of other applications." Now there are five distinct applications of the one intrinsic meaning of the word "soul," and many of the difficulties of this paper are got rid of entirely when we see that there are these distinct applications. For instance, the soul means the blood, or the life, or the person, for we have the passage "there were converted three thousand souls." In the midst of all such usages, we must look, in support of the argument for the tripartite nature of man, to those passages in Scripture where the intrinsic and original meaning of the word

is preserved, and not to those by-meanings which every student knows must necessarily exist in all languages. (Cheers.)

Rev. E. WHITE.—Though a stranger, perhaps I may be permitted to occupy your attention for a few minutes. I came here to-night expecting to get my mind settled on this subject. I have read statements in English as well as in German, on both sides of the question, and, generally speaking, I have been a humble disciple of Heard and De Retsch, agreeing that the body, soul, and spirit are the common properties of humanity. But I have begun to feel great and growing difficulties which lead me to question that opinion, those difficulties arising from the consideration of certain scriptural passages which have not been so thoroughly criticised to-night as I had hoped they would have been. That important passage in our Lord's discourse with Nicodemus, where He says : "That which is born of the flesh is flesh, and that which is born of the Spirit is Spirit," is a remarkably strong expression, the words *τὸ γεγεννημένον* being used in both cases. Well, I put that against the passage in Jude :—"They are sensual, not having spirit" (*πνεῦμα* without the article). From these passages, it would appear that the spiritual man is generically different from the *ψυχικός*, or animal man. Then St. Peter, in his first epistle, speaks of "being born again, not of corruptible seed, but of incorruptible, by the word of God, which liveth and abideth for ever." When we have this absolute distinction made in genus between the two, I confess that I am brought to a halt.

Rev. C. A. ROW.—So far as my own observation of the New Testament goes, I will venture to give an opinion of the criticisms contained in this paper. First of all, I believe that *ψυχή* is unquestionably used for the lower parts of man's nature—there can be no doubt about that—but it is also sometimes used in relation to the higher parts of his nature. In addition to this, there is the term *πνεῦμα*, which is invariably used to denote the higher, and not the lower, parts of his nature. This is the distinction between the two ; but the usage of the New Testament is simply popular. No one who has read it in Greek can think that there is a scientific usage of words. Then, so far as the tripartite division of man's nature is concerned, I take it for granted that the sacred writers, whenever they speak of that nature, have used the popular terms which were common at the time in which they wrote. And it was essentially necessary that they should do so, because, had they not, they must have made definitions, just as philosophical writers are in the habit of doing. Look at philosophical literature. If a writer uses a philosophical term relating to the mind, he always defines it, as is the case in the writings of Aristotle. For an example among modern writers, we have Coleridge. He has used the terms "understanding" and "reason" in a particular sense ; and when doing so, he always accompanies those terms with definitions. Indeed, it is absolutely impossible to use current language in a strictly scientific sense, unless the writers doing so accompany their terms with definitions of some sort. I cordially agree with a great portion of Mr. Graham's paper, and have been particularly satis-

fied with it in respect to some points. In the last one with which Mr. Graham deals, I was glad to find him strongly maintaining, as I do that the *πνεῦμα* is that in which human morality chiefly centres. Since our last meeting, I have read through the conclusion of Mr. Darwin's recent book on the Descent of Man, and I must say that I was perfectly amazed to find a man of such eminence using arguments which are so absolutely rotten; but that only proves that wherever men of science venture out of their own special province, they have no more light than ordinary men of intelligence, and indeed they very often have less. It is a point on which I feel strongly, when people tell me that the *ψυχή* may possibly perish, and yet that the whole weight of man's morality lies in the *ψυχή*. My own general idea of the terms in the New Testament is that they were not intended to give us a scientific division of man's nature, but were simply popular words—three Greek words, in their common acceptation, covering all that was to be found in man. There is, however, one important omission in Mr. Graham's paper, which has already been pointed out; he does not describe what the *σῶμα* really consists of, and our former discussion on this subject also left that point untouched. If you take the *σῶμα* as a portion of man, it must include some portion of feeling and of the lower operations which pertain to the *ψυχή*; for I am not prepared to say or believe that mere bodily matter, like this table for instance, can ever become the subject of feeling by any mere alteration of the particles of matter which compose it. It seems to me that these things always belong to something distinct from mere material organization. I do not suppose that you will ever get feeling into this table; and I think that these terms, and many others used by Mr. Graham, are in point of fact used simply in a popular sense. I have no doubt that the term *πνεῦμα* includes intelligence and the moral perceptions; and according to the usage of the New Testament Scriptures, the term *πνεῦμα* refers to all that is high, elevated, and grand in man, whatever it may be. I hold that the high poetic faculty in man would reside in the *πνεῦμα*, and that the higher powers of the affections would reside in the *πνεῦμα* also. I do not think they are separate essences in the least degree, but different species of mental phenomena; and in the *πνεῦμα*, I suppose, would be found all our moral intuitions. It is important that we should place this upon firm ground; because, if there is anything stable in man, it is his deep moral intuition, and if we are not careful here, we shall be in danger of falling into the worst form of infidelity; for now its most prevailing form is to resolve all that is moral in man simply into that which is merely physical; and if we go to the lower parts of man's nature we are in danger of resolving all these things, including the free will, into a mere physical law. We are distinctly conscious of a bipartite nature in man. There is the I, and that which is not the I—I speak of my body, my feelings, and affections—and I recognize the distinction between the I, which has will, and that which possesses these various attributes. We are conscious of some distinction between them; but beyond that we cannot go. All I contend for, and what I would press upon your con-

sideration, is the high importance of seeing clearly and distinctly that all the high elements of morality in man cannot be separated from that which is spiritual. I cannot see the line which separates spirituality from morality ; or, in other words, I believe that the motive of all morality is unquestionably to be found deep down in the human spirit. (Cheers.)

Rev. Sir TILSON-MARSH.—In rising to make one or two observations on this subject, I may just say that I should be sorry to do so without alluding for one moment to the deep sorrow I feel for the great loss which we as a society have sustained in the death of our excellent and most courteous friend Mr. Reddie. He has gone, as we believe, to that blessed land in which he has left the *σῶμα* behind at last, and carried the *πνεῦμα* to the presence of the Eternal *πνεῦμα*—τὸ Πνεῦμα ἅγιον, the Holy Spirit—to the immediate presence of God Himself. He is happy, though his gain is our loss. And now one word on the subject before us, which I think I was the first to introduce to the Society, on an occasion when I was supported by our excellent friend Mr. James. I cordially agree with Mr. Graham in much of the admirable paper which he has presented to us. That paper contains a vast amount of scriptural truth to which the reasonable mind must accede. But I also agree with Mr. James that man's nature is clearly tripartite, and that the Apostle Paul, in laying down his definition, if I may so say, in the fifth chapter of the First Epistle to the Thessalonians, leaves us without doubt on that point. Man's nature is not quadrupartite—it is tripartite—there are the *σῶμα*, the *ψυχὴ*, and the *πνεῦμα*. The *σῶμα* we are all agreed upon, and we are also agreed upon the *πνεῦμα*. The only question, then, is—what is the *ψυχὴ*—and whether it lasts through the eternal world, or whether it ceases when the body dies in the present world. I confess to feeling very great difficulty on this point. My own inclination, derived from a close study of the Greek New Testament, is to believe that the *ψυχὴ* does cease for a time with the body—that the body lies in the grave, and the *ψυχὴ* disappears, but that the *πνεῦμα* is in existence in the intermediate state. It is clear that that state is a state of rational existence, in which there is a consciousness of what is passing, and in which there is a remembrance of past events ; because we find our Lord, although in parabolic language, implying that most distinctly in the parable of Dives and Lazarus. Our Lord would hardly lead us to believe that there could pass intelligent expression between the rational *πνεῦμα* of Dives in the world of the lost, and the rational *πνεῦμα* of Abraham in the world of the saved, without there being any such possibility ; and I am therefore led to believe that our Lord, in thus representing Dives as communicating with Abraham, was asserting the existence of his *πνεῦμα* in the world of the lost. Then, again, we find the spirits represented under the altar, as crying out to God : “ How long, O Lord ! how long ? ” anticipating that day when the complete work of redemption should be before the Church, when the present time of probation should have passed away ; and when, therefore, God's whole plan in this intermediate term of discipline for men would be exhibited to the Church and to the principalities and powers in heavenly places. I say that if these spirits are represented as under the

altar, anticipating this time and asking when it shall be—"How long, O Lord! how long?" it follows that there must evidently be consciousness in these spirits. But there is no mention, except in that passage, of the *ψυχή*. I believe the word there is *ψυχὰς*, and that forms my only difficulty. It certainly makes against my argument, and leaves me in doubt as to whether the *ψυχή* does lie in the grave with the body, and rise again at the resurrection morning, or whether it is in existence in the intermediate state. I do not think we can resolve this difficulty, but this I do believe, that the statement of St. Paul when he prays that the whole man, body, soul, and spirit, shall be sanctified and preserved blameless unto the coming of our Lord Jesus Christ, implies that the *ψυχή* must have an eternal existence. I cannot get rid of that argument, and therefore I think that the *σῶμα*, *ψυχή*, and *πνεῦμα* are evidently in existence on the resurrection morning. It is, however, possible, that the *ψυχή* may lapse while the body is in the ground, and that the *πνεῦμα* alone may be in existence in the intermediate state. I cordially agree with one of the previous speakers who said that this subject is one of immense importance in the scientific discussions of the day. I have many personal friends in the scientific world who, I am sure, would find their difficulties greatly reduced, if not altogether removed, if this fact were brought before them as stated by St. Paul in the Holy Scriptures, namely, that there is this tripartite division in man's nature—that in the *ψυχή* man has sympathies with the animal world, and that his *ψυχή*, having certain sympathies with what we call the instinctive nature of animals, explains to us how there is that agreement between man and the irrational world which we see existing. At the same time, the definition of man as a tripartite being having also the *πνεῦμα*, would show to these people that there also exist in man powers which are entirely distinct from the capacities which he shares with the lower animals, and which dignify man and separate him entirely from the animal world. I think, therefore, that the discussion introduced here this evening is one of great importance in its bearings upon the controversies of the day. Many of these gentlemen of whom I have spoken are men of very high intelligence, thoroughly fitted to explore the facts of nature; but they do not see the line of separation between the intelligence of animals and what they call the soul of man. Give them the word *ψυχή*, and their difficulties are resolved, and you give them also the *πνεῦμα*, which is above the *ψυχή*. Ask them to account for the differential peculiarities of man, and you will find that they cannot do so except on the supposition of the existence of the *πνεῦμα*. For instance, take articulate speech. What animals are there which can exchange views and opinions as we are doing this evening? What gives us the power we possess? Is there any other animal in the world that has it? Certainly not. Then articulate speech differentiates man from the irrational creatures; and we may turn round on these men, although they may be good and honest men, and say: "How do you account for these differential peculiarities except on the supposition that man has within him the *πνεῦμα* in addition to the *ψυχή*?" This is man's tripartite nature. It explains all these diffi-

culties, and I think may do much to reconcile men, and bring them in harmony to the Author of divine revelation.

The CHAIRMAN.—In relation to this subject, I cannot avoid offering my strong protest against the tendency of the work lately published by Mr. Darwin on the Descent of Man, and on Natural Selection. That work has been very ably reviewed in the *Times* lately, and I call attention to it because it appears to me that its obvious tendency is to rob man of that inestimably superior portion of his existence, the *πνεῦμα*, since the gist of that work is to show that man is derived from the lower animals, not by any sudden change, but by a gradual amelioration and adaptation to circumstances. The book also goes on to show that probably all kinds of animals are derived from those of inferior organization. The whole tendency of the work is simply this: It is elsewhere argued that the simplest forms of organic life are capable of being produced by a concurrence of inorganic particles without the influence of any pre-existing germ, and the doctrine is advanced by Mr. Darwin that we can ascend, step by step, from the lower to the higher forms of organic life, and even from apes to man himself. Now what is the effect of this but to show that there is no necessity for a Creator; that man has proceeded by degrees from inorganic matter simply in obedience to the laws of inorganic matter? Mr. Darwin does not say so much, but that is the obvious tendency of the work; as it tends to get rid of the *πνεῦμα* altogether—to annihilate it entirely—I enter on this occasion my intensely strong protest against that tendency. The book throughout is written in the potential mood: such and such things may be, and could be, and might be, if—but he does not supply the “if.” If there were no God, no Creator, no truth in the Bible—if the Bible were a series of ideas and notions having no solid foundation—then, perhaps, such things might be.

Rev. G. HENSLOW.—There is a passage at the end of Mr. Darwin’s book in which he protests against the idea that these things are not the work of a Creator.

The CHAIRMAN.—But I am simply stating what is the obvious tendency of the book. It is all very well for the author to say he does not mean it to be so. I am glad that point is disclaimed by Mr. Darwin, but I do not think it interferes with the obvious tendency of the work, and I merely mention this matter in connection with the very important subject of the tripartite nature of man. (Cheers.)

Mr. GRAHAM.—I have to thank the various speakers for their agreement with so much of my paper—indeed I think I may say for their agreement with all the essential principles contained in it. You, sir, have touched upon a point which, to me, is profoundly important,—the view, I mean, that our ethical and moral nature is not in the *ψυχή*, but in the *πνεῦμα*. I feel that the moment we admit that our ethical and moral nature is in the *ψυχή*, and then admit the fact that the *ψυχή* may perish, we give up what Mr. Row has properly denominated the dignity of our nature, and I think we give up the one great argument which distinguishes man from the in-

ferior creatures. As to the observations which fell from Mr. James, I am obliged to him for his commendation of my paper, but with regard to his remark that the title of it should have been the quadrupartite, and not the tripartite nature of man, I submit that he has forgotten the fact that I connect animal life with the body. I regard the *σῶμα* as embracing the animal life which dies with it ; and then I make the *ψυχὴ* distinct—that which stands, as it were, between the *πνεῦμα* and the *σῶμα*. With that remark I leave the paper to speak for itself. I waited to hear some arguments from him as to where he disagreed with me ; but I may say, not only with reference to him but with regard to others who have differed from me, that they have not really dealt with my arguments. If I were combating a paper, I should grapple with its arguments and endeavour to overthrow them, and then sustain my own positions upon distinct and independent grounds. Now with regard to the objection that I have confounded the *nephesh* and the *ruach*, the *ψυχὴ* and the *πνεῦμα*, I think that that objection is not valid. I have endeavoured to demonstrate two things,—and no one has attempted to overthrow my arguments,—unity of essence, and yet distinctness, as Holy Scripture recognizes it ; that is to say, that the ethical and moral nature is in the *πνεῦμα*. I fancy Sir Tilson-Marsh has acknowledged the same thing, and that is the principal point which I wished to establish. I take it that when that is established, we do see that there is a clear distinction between the *nephesh* and the *ruach*, the *ψυχὴ* and the *πνεῦμα*. And yet I hold that they are obviously in Holy Scripture one in essence. I agree with those speakers who have said that the terms are not used in a strictly logical sense in either of the Testaments ; in my paper I fully recognize that fact. With regard to Mr. White's observations, I have only to say that it would have been impossible for me to have entered into exegesis in this paper, and I did not do it except in an occasional word, to show the force of my quotations. But the Institute does not recognize exegesis as entering into the elements of its papers, unless it is absolutely necessary to make a passage of Scripture clear ; and if I had been as exegetical as I wished to be, my paper would have been of much greater length. As to what has fallen from Mr. Row, I am gratified to find a gentleman of his acumen agreeing with me, and, in the main, defending my paper. As to the *nishmath chaiyim* I suppose there is a development of the meaning of those lives, afterwards, in the *nephesh* and *ruach* of the Old Testament ; but I do not lay much stress upon that. On Elohim I would offer a few remarks. When the Blessed God says "Let us make man," you have there a plural pronoun connected with a plural noun ; and in the opening of Genesis you have the united action of the Three Persons expressed in a singular verb ; but you have also, in one case at least, a plural verb ; and I take it that you have the great doctrine of the Trinity laid down there. The spirit of God brooded over them, as Milton correctly expresses the idea of the Hebrew, to make the waters pregnant. Now hear what Job says : "By His spirit he has garnished the heavens" ; He has studded the blue dome above us with worlds of light. In the New Testament I find the development of the

Trinity still more full and forcible. I find it stated, at the opening of the gospel of St. John, that the *λόγος*, the Eternal Word, which expressed all that was in the Father, created all things, and that without Him was not anything made which was made ; and St. Paul says the same thing : " By Him were all things created that are in heaven, and that are in earth, visible and invisible, whether they be thrones or dominions or principalities or powers." He is the efficient and final cause, for all things were created by Him, and for Him. All that comes out of Elohim. It has been said that " we " is the style of potentates and kings, but in Scripture it is not the style of God. He speaks in the first person singular : " I am the Lord thy God, thou shalt have no other gods before Me," not " before Us." You find the great principle of Monotheism maintained in His dealings with Jew and Gentile ; and you find the great truth of the Trinity displayed in the Old Testament, as in that passage of Isaiah, where He says, " Whom shall I send, and who will go for Us ? " I find the Trinity connected with Creation ; I find the three persons brought out clearly, just like the white ray of light that gives us the rainbow when it is broken into its original colours. I find the glorious and blessed God presenting Himself in this form of monotheism, and I find Him exhibiting the Trinity in unity in all its glory and majesty, and brought out in creation in connection with the Elohim : " Let us make man in our image." This is one of the grandest and most forcible arguments which Holy Scripture affords for the doctrine of the Trinity. I have only to thank again those speakers who have commended my paper. I thought there would have been many arrows levelled at me, and was trying to construct a seven-fold shield, such as Ajax bore, but find that I do not need it.

The Meeting was then adjourned.

INTERMEDIATE MEETING, APRIL 17, 1871.

THE REV. G. HENSLOW, M.A., F.L.S., IN THE CHAIR.

The Minutes of the last Meeting were read and confirmed ; and the following elections were announced :—

MEMBER :—R. C. Shettle, Esq., M.D., 97, London Street, Reading.

ASSOCIATE :—The Rev. W. S. Seymour, 11, Chapel Terrace, Tredegar Square, Bow Road, E.

Also the presentation to the Library of the following works :—

| | | |
|----------------------------------|------------------------------|-------------------------|
| “The Nature of the Vital Force.” | By R. C. Shettle, Esq., M.D, | |
| | | <i>From the Author.</i> |
| “The Pathology of Insanity.” | By the same. | <i>Ditto.</i> |

It was then announced that the Council had passed the following resolution in regard to the future discussions on papers :—

“That twenty minutes be allowed for each speaker ; and so soon as any one shall have spoken for fifteen, the Chairman shall signify to him that five minutes remain, wherein his remarks must be brought to a conclusion.”

Dr. E. Haughton then delivered a lecture “On Evidences of Design in the Constitution of Nature.”

A discussion ensued, in which the Rev. J. H. Titcomb, Mr. T. W. Masterman, Dr. J. A. Fraser, Rev. C. Graham, Captain F. Petrie, and the Chairman took part. Dr. Haughton having replied, the proceedings terminated, and the Meeting was adjourned.

ORDINARY MEETING, MAY 1, 1871.

THE RIGHT HONOURABLE THE EARL OF SHAFTESBURY, K.G.,
PRESIDENT, IN THE CHAIR.

The Minutes of the last Meeting were read and confirmed ; and the following Elections were announced :—

MEMBERS :—His Grace the Duke of Marlborough, K.G., 10, St. James's Square ; The Right Honourable the Earl of Harrowby, K.G., 39, Grosvenor Square ; The Right Honourable and Right Reverend the Lord Bishop of London, London House ; The Right Honourable the Lord Harris, G.C.S.I., 47, Charles Street, Berkeley Square ; J. Walter, Esq., M.P., 40, Upper Grosvenor Street ; The Reverend Vyvyan H. Moyle, M.A., F.R.G.S., F.R.H.S., Normanby House, Middlesborough ; F. I. Warner, Esq., 3, Clifton Terrace, Winchester.

ASSOCIATES :—Rev. J. H. Broome, M.A., Houghton Hall, Rougham ; Mrs. Zoe Thompson, 4, Albert Terrace, Douglas, Isle of Man ; Rev. F. Whitfield, M.A., St. John's Parsonage, Bexley.

Also, the presentation to the Library of the following works :—

- Journal of the Royal United Service Institution. Part LXI. Appendix.
From the Institution.
- "The Astral Hebrew Alphabet." By the Rev. J. H. Broome, M.A.
From the Author.
- "The Memoirs of Professor Henslow." By the Rev. L. Jenkyns, M.A.
From the Rev. G. Henslow, M.A.
- "A Missionary Cruise in the South Pacific." By the Rev. S. J. Whitmee.
From the Author.
- "The Mosaic Theory." By T. Harriot, Esq. *Ditto.*
- "Spirit, and Soul, and Body." By S. Hanson, Esq. *Ditto.*

The following paper was then read by the Author :—

ETHNIC TESTIMONIES TO THE PENTATEUCH.

By the Rev. J. H. TITCOMB, M.A., M.V.I.

1. **I**N order that I may encumber this Paper with as little preface as possible, I shall at once commence by stating the principle upon which it will be constructed.

2. (i.) Assuming, for the sake of argument, that the facts recorded by Moses in the first eleven chapters of Genesis are true, it is obvious that certain recollections and traditions of them must have been carried about by all the tribes which were dispersed from Babel. Now, as the latest deductions of comparative philology declare the *Turanian* family of nations to exhibit most of the elements of that primeval form of speech out of which, at some very early period, the *Hamitic*, the *Semitic*, and *Aryan* tongues were gradually evolved,* I shall begin by stating certain traditional recollections of the Mosaic narrative which have been preserved in the *Turanian* group.

3. (ii.) For the sake of adhering as much as possible to an orderly and scientific course, I shall next take the *Hamitic* family of nations, and chiefly that of Egypt; in which family we may expect to find evidence, not only of the earlier facts recorded by Moses, but of those also which relate to the residence of Israel in Egypt.

4. (iii.) Our next line of investigation will be that of the *Semitic* family of nations; which will bring us to the Assyrians and Phoenicians.

5. (iv.) Our last field of inquiry will be the *Aryan* family of nations; which will first carry us to India, and afterwards to Greece and Scandinavia.

6. By this method I think we shall fairly cover the whole area of ethnic testimony to the Pentateuch. Let us see what such a field of investigation produces.

7. Commencing, then, with

I. THE TURANIAN NATIONS,

and assuming that some of the first waves of human life during the progressive dispersion of mankind must have flowed in that channel across Central Asia to China, and so onward,

* See Essay XI. to Rawlinson's *Herodotus*, vol. i.

under modified forms, through the islands of the Pacific to the New World, I will first take you to

(1.) *The Nations of America.*

8. When the Spaniards discovered Mexico, we are told that they amused themselves by endeavouring to trace all sorts of fanciful proofs of a traditional connection between the inhabitants of that country and those of the Old World, and especially of their connection with the Scripture records. Many of these were ridiculous. Some, however, are too striking and important to be overlooked.

9. They found (e.g.) in the midst of the Mexican Pantheon, a goddess whom the Aztecs venerated with the greatest devotion, and whose personal identity with the Mosaic Eve seems beyond dispute. This goddess was described as "the first brought forth," who "bequeathed the sufferings of childbirth to women," and "by whom sin came into the world." Moreover, she was usually represented with a serpent near her; and her very name (Cioactl) signified "serpent woman." * Humboldt, too, in his *Researches*, describes an Aztec hieroglyphic painting of this goddess still preserved in the Vatican, which represents her in actual conversation with a serpent; that serpent, moreover, being drawn *erect*, as if in its state before the curse.†

10. This recollection of the Fall of man seems to have been universally stamped upon the human mind. It meets us everywhere. So does the recollection of Noah's Deluge. I am quite aware of the possibility of the occurrence of great local inundations. Sir Charles Lyell gives accounts of such,‡ and shows how frequent they are in countries subject to the incursions of great earthquake waves. Recollections of these local floods, however, by no means invalidate that older tradition of a more general deluge of which I am going to speak,—a tradition which is based upon minute details so exactly corresponding with those presented to us in the first part of the Pentateuch, that it is next to impossible not to identify it with them. For example, on the discovery of the island of Cuba, when the natives were questioned as to their origin, they replied, among other things, that they had heard from their ancestors how "an old man having foreseen a deluge with which God designed to chastise the sins of men, built a large

* Prescott's *Conquest of Mexico*, Appendix I.

† Humboldt's *Researches*, vol. i. p. 195.

‡ *Principles of Geology*, book ii. chap. 29.

canoe and embarked in it with his family and many animals ; that when the floods ceased he sent out a raven which, because it found food suited to its nature, never returned ; that then he sent out a pigeon, which soon returned bearing the branch of the hoba tree ; and that when the old man saw the earth dry he disembarked."* The ancient Peruvians related a somewhat similar story to the Spaniards. They said that it had "once rained so violently as to deluge all the lower parts of the country, in consequence of which an universal destruction of human life took place, seven persons only excepted, who escaped into caves on the tops of mountains. Into these elevated retirements they had conveyed a stock of provisions and a number of living animals. As soon as the rain ceased they sent out two dogs which returned to them smeared with mud and slime. Hence they concluded that the flood had not yet subsided. After a certain interval, they sent out more dogs, which coming back, convinced them that the earth was now habitable. Upon this they left the places into which they had retired, and became the progenitors of the present race of men."† Many other very similar recollections of a general deluge have been found among the various tribes of North and South America. But of all these the most satisfactory is that which belonged to the ancient Aztecs of Mexico. When America was discovered, this people were found in possession of a method of picture-writing somewhat analogous to the manner of Egyptian hieroglyphics. In this rude state of civilization they were enabled to keep up records of their past history, and preserve their mythological creed with tolerable accuracy. Thus the recollection of a deluge, which in its main points is unmistakably that of Noah's, was visibly presented in books made of the buffalo and deer skin. This painting represented a man (Coxcox) and his wife, on a raft, which rested at the foot of a mountain. A dove, too, from the top of a tree was distributing languages to the men born after the deluge, because they were dumb.‡ Humboldt says that of the different nations which inhabited Mexico five had paintings representing this deluge of Coxcox ; the tradition being that "Coxcox embarked in a spacious canoe with his wife and children, several animals and grain. When the great spirit ordered the waters to withdraw, Coxcox sent out a vulture. This bird did not return, on account of the car-

* Quoted from the Appendix to Norman's *Rambles in Yucatan*.

† Quoted from Faber's *Horæ Mosaicæ*, vol. i. p. 116.

‡ See Priest's *American Antiquities*.

cases with which the earth was strewed. He then sent out other birds, one of which, the humming-bird, alone returned, holding in its beak a branch with leaves. Then, seeing that fresh verdure covered the soil, he quitted the bark near the mountain of Colluacan.”*

11. Regarding these traditions as anterior to the contact of modern civilization with the native American race, I venture to adduce them as a reasonable testimony, however distorted in some respects, to the main outline of history recorded by the pen of Moses. I am aware that doubts have been thrown upon their authenticity, as being inventions of the Spanish priests. Humboldt, however, no mean authority, having fully examined the question, and credited their aboriginal character, I offer no apology here for presenting them as part of my present argument.

12. Whether the following is equally trustworthy, it is, perhaps, impossible to say. A Spanish Dominican priest, at any rate, affirms that he committed it to writing from the natives of Mexico, in 1566; and it is certainly by no means an impossible recollection of the ancient Asiatic record imported from the plains of Babel. “Before the great inundation, the country of Anahuac was inhabited by giants. All those who did not perish were transformed to fishes, except seven, who fled into a cavern. When the waters subsided, one of the giants, Xelhua, went to Cholula, where, as a memorial of the mountain which had served for an asylum, he built an artificial hill in the form of a pyramid. The gods beheld with wrath this edifice, the top of which was to reach the clouds. They hurled fire upon it. Numbers of the workmen perished; the work was discontinued, and the monument was afterwards dedicated to Quetzalcoatl, the god of the air.”† It is worthy of notice, also, that this pyramid of Cholula was constructed in the direction of the four cardinal points, and is still called “the mountain of unbaked bricks.”‡ Much might be said also of the more modern tribes—of the unfortunate Mandans, for instance, who celebrated an annual festival in honour of the deluge, when they used to assemble round a large canoe, one man dramatically running from the mountains, and personating the last man of the old world;§ and of the Cree Indians and others, who believe that the great spirit created

* Humboldt's *Vues des Cordillères*.

† Humboldt's *Researches*, vol. i. pp. 95, 96.

‡ *Idem*, pp. 86–92.

§ It is curious fact that this tribe was found by Mr. Catlin in actual possession of the tradition of forty days' rain.

man from *clay*. But time forbidding us to linger any longer in America, our proper course would now be to sail through

(2.) *The Islands of Polynesia.*

13. As the inexorable laws of space forbid my entering into details, I only observe that with relation to the Fall of man, Marsden, the great New Zealand missionary, found a tradition in those islands that the serpent once spoke with a human voice,* and that, with regard to the Deluge of Noah, the Fiji Islanders preserve a recollection of eight saved persons,† while the inhabitants of the Leeward Islands chronicle a rescue of two people in the midst of universal destruction, who afterwards became the progenitors of the present inhabitants of the world.‡ An interesting chapter of thought might easily be written under this section of the subject. But we must pass on to

(3.) *The Countries of Mongolia Proper.*

14. From evidence furnished us by Chevalier Ramsay on the Mythology of the Pagans,§ we learn that the ancient Chinese cosmogony taught the existence of a state in which “pure pleasure and perfect tranquillity reigned everywhere. There was neither labour, nor pain, nor sorrow. The heart rejoiced in truth; and there was no mixture of falsehood.” Afterwards there came a dreadful convulsion of nature, in which “the pillars of heaven were broken. The earth shook to its foundations, and fell to pieces; and the waters inclosed within its bosom burst forth with violence, and overflowed it. The sun was eclipsed, the planets altered their courses, and the grand harmony of nature was disturbed.” Moreover, “all these evils,” says the Book Liki, “arose from man’s despising the supreme monarch of the universe. He would needs dispute about truth and falsehood; and these disputes banished the eternal reason.”

15. Martinus,|| too, in his History of China, relates of Fo-hi, the first emperor, that, according to ancient tradition, he was produced supernaturally from a *rainbow*. He is also

* See an article in the *Christian Observer* for 1810, p. 724.

† See Wilkes’s *Narrative of the United States Exploring Expedition*, vol. ii. p. 50.

‡ Prichard’s *Researches into the Physical History of Mankind*, vol. v. p. 116.

§ Pp. 266, 267.

|| Martin., *Hist.*, lib. i. p. 21. See also Faber’s *Hora Mosaica*, vol. i. p. 140.

said to have bred *seven sorts of animals for sacrifice*; and to have come from the *western districts* of the empire, where he appeared immediately after that convulsion of the earth just described, and where he is attended by *seven* companions, his *wife*, and his *three sons and daughters*, by whose intermarriage the whole circle of the earth was completed.*

16. It is almost impossible to read these statements without referring them to dim and distorted recollections of the Fall of man and paradise, of Noah and the Deluge. As to the latter, there is an additional item of most singular ethnic evidence, in the hieroglyphical or picture character by which, from time immemorial, the Chinese have expressed the word "ship." Bryant† first brought the circumstance before me; but I have since tested it for myself, and found it perfectly correct. The fact is this. The sign for a large ship is composed of three separate picture characters, all grouped together into one; viz. a *boat*, a *mouth*, and the *number eight*; which if read as a sentence would mean, "*eight persons in a boat*." How it came to pass that the elementary idea of a large first-class vessel should have been thus anciently connected with eight persons in a boat, I cannot say; but, as a matter of subsidiary, and an increase of cumulative evidence, it is certainly not unreasonable to refer it to a traditional remembrance of the time of Noah.

17. Passing away from China, we find little which throws further light on this subject. Among the Mantshu Tartars there is a mythological story to the effect that they had originally sprung from a woman, who, *having come down from heaven, had been detained on earth by eating beautiful fruits*; ‡ —a story which may not be without some bearing on a traditional remembrance of the Fall. Among the Mongols proper I read of the sacrifices of rams, sheep, and lambs a year old; while, in their prayers and songs of invocation, the "life" so offered is called "a compensation," and the "body" is described as "a gift." § Among the same people, there is also an old mythological story of the first man and woman who made the rest of the human race out of paper; which race, while they slept, were all maimed and defiled by the Evil Spirit.||

18. I am fully aware that testimonies like these, taken

* *Christ and other Masters*, part 3, chap. i.; and McClatchie, in *Asiatic Journal* of 1856, xvi. pp. 403, 404.

† Bryant's *Analysis of Mythology*, vol. iii. p. 9.

‡ See Latham's *Descriptive Ethnology*, vol. i. p. 269.

§ *Idem*, vol. i. pp. 319–321. || *Idem*, vol. i. p. 322.

singly, are very loose and vague. They are, nevertheless, of great interest and value, when grouped together into cumulative evidence; and, were they pursued by a more painstaking and exhaustive research into the nations of Central and Northern Asia, and of Lapland, they would be still more satisfactory.

Let us turn now to

II. THE HAMITIC NATIONS.

19. Of which group, as the ancient Egyptian is the most important, I propose chiefly to confine my remarks to it.

(1.) *Ancient Egypt.*

20. Studying the maps of Asia and Africa, it is obvious that the earliest migrations of mankind into the latter country must, by the teaching of Genesis, have taken a south-western course. Accordingly we should expect the first settlers in Egypt to arrive from the north, and then proceed southward; and we should be obliged to allow the enemies of the Bible some just cause for triumph, if they could show that the oldest existing monuments lay along an opposite line. But the very reverse of this is the case. The northern part of Egypt, with the pyramids of Memphis, represents the empire of Menes and the earliest kings; while central Egypt chiefly represents the remaining period of the old empire; Thebes, with the country southward, displays evidence of the more splendid dynasties coeval with Moses and the Israelites; and Nubia, the latest dynasties of all. Thus departed Egypt, so far as she can speak of her silent remains, bears the strongest testimony to the truth of the Pentateuch in relation to the dispersion of mankind.

21. Light, too, is thrown by the Egyptian monuments upon certain important names which appear in the early part of Genesis. Thus *Khem*, or *Ohemi*, signifying the land of Egypt, is obviously the same as Ham; *Seb*, one of the greater gods, may naturally be identical with Seba, one of the sons of Cush (Gen. x. 7); *Kheta*, a people over whom Sethos is painted as triumphing, on one of the monuments of Karnak, were doubtless the sons of Heth (Gen. x. 15); and the *Oaphtorim*, named also at Karnak among the nations which Thothmes III. subdued, were undoubtedly the people whom Moses described by that name in Gen. x. 14 and Deut. ii. 23. Among other illustrations which might be adduced, I select the title which was bestowed upon the chief priest of the Egyptian temples,

i. e. *Sem* ;* bearing testimony to a traditional remembrance of Shem, who, as the eldest son of Noah, was, on patriarchal principles, high priest over his brethren after his father's death. Speaking of Noah, it is worthy of remark also, that some of the hieroglyphic inscriptions represent the "god of water," under the name of Noh, or No. This was the deity who presided over the annual overflow of the Nile; a title which plainly relates to some traditional recollection of Noah presiding triumphantly over the Flood. I think it impossible to review these strong affinities between old Egyptian names, and some of the earliest and most important names of the Bible, without admitting the value of their testimony.†

22. If this kind of testimony, however, be thought insufficient, and an examination of the tombs and monuments, in relation to the manners and customs of Egypt, be considered more to the point, we have only to set ourselves to the task, in order to become equally convinced of the truly historical character of the Pentateuch. I mean to say there are paintings found on these monuments which no less verify the statements of Moses. For example, does the Egyptian Ishmael become "an archer," when thrown upon his own resources in the desert? The monuments show that archery was everywhere common in Egypt. Did Hagar live as a bondwoman with Abraham, after his visit to Egypt? What wonder? The monuments portray domestic slavery as everywhere practised in that nation. Was Joseph sold to Arabian merchants on their way to Egypt? The monuments depict such Arabian merchants as in the habit of bringing balsam and myrrh to Egypt for embalming the dead. Were the Israelites persecuted in brickmaking? There is one monument which exhibits a number of slaves in the act of making bricks under cruel taskmasters. To pursue these monumental confirmations of the Pentateuch, however, would be too long and tedious for the present paper, which aims rather at being comprehensive than exhaustive. Nor is it needful after the valuable facts brought out in the discussion on Mr. Saville's paper in an earlier period of this session, when we heard that the Anastasian papyri exhibited written testimony to the historical names of "Jannes and Jambres," of "Balak, the son of Zippor," and of "Phinehas." And yet I cannot leave this part of the subject without touching on one more point; I mean the evident traditionary recollections of Paradise which are exhibited in some of the Egyptian monuments. I refer you,

* See Wilkinson's *Egypt*, vol. i. p. 319. (Small edition.)

† This list might easily be supplemented; as (e. g.) Raamses, Pithom.

for example, to the 52nd plate in Denon's first work on Egypt, in which a snake is drawn with the branch of a tree springing from its back, and having two human heads. Also to a painting in the temple of Osiris at Philæ, where a *man and woman are standing by a tree*, from which one has *plucked some fruit and given it to the other*, while a *serpent stands erect* by their side. I do not, of course, mean to say that such emblematic devices could not have been invented by the Egyptians apart from any remembrance of the primeval event recorded in the Pentateuch by Moses. Nevertheless the coincidence is most remarkable. The combination of a tree, or the foliage of a tree, with a serpent in an erect position, and a man and woman, are all singularly suggestive; and convey, I think, to any candid mind, some antecedent probability of their having been derived from a tradition of the old story of Eden.

23. I shall close this part of my subject with a brief notice of a passage in Egyptian history which, in the judgment of Lepsius (as, indeed, of all candid thinkers) bears unmistakable evidence of identity with the Hebrew exodus. I allude to the expulsion of the lepers. This is made the more remarkable by the chronology which Lepsius adopts, and by which he shows that the expulsion happened in the reign of Menepthah, or Amenophis II., the very king under whom the exodus took place! The account is given by Manetho, of which the salient points are as follows:—

“Amenophis, having determined to expel from Egypt a large number of lepers, first set them to work in the stone quarries on the east of the Nile, for the purpose of separating them from the rest of the people; after having made them suffer in which, he removed them to a deserted town, named Abaris. Here they were led into revolt by one named Osarsiph, who established, as their first law, that they should worship none of the Egyptian gods, and that they might eat and sacrifice animals which were deemed most sacred by the Egyptians. The leader of this revolt afterwards changed his name, and was called Moses, to whom Amenophis gave battle, pursuing them to the borders of Syria.”*

24. Lepsius shows,† I think, most fully, the various reasons which justify us in considering this account to be none other than that of Israel's exodus from Egypt, commenting chiefly upon two things; first, that these persecuted and expelled people *differed in religious faith from the Egyptians*; and, secondly, that, *as charged with the plague of leprosy*, there is

* Taken from *Josephus, contra. Ap.*, i. 26.

† Lepsius, *Egypt, Ethiopia, and Sinai*, pp. 404–418.

much which corroborates the testimony of the Pentateuch to the prevalence of that disease among the Jews, after they had left Egypt and gone into the wilderness of Sinai. (See such passages as Ex. iv. 6; ix. 3, 9; Levit. xiv.; Numb. xii. 10.) Manetho, it must be remembered, is an Egyptian witness, and may, therefore, be fairly included as part of our ethnic testimony under this division of the subject.

25. There remains another field of inquiry upon which I have only time to speak slightly. I refer to the archaic stock of Chaldæans, Canaanites, and Elamites, of whom I must now say a few brief words in order.

(2.) *Chaldæa, before Abraham.*

26. Until lately the whole Chaldæan empire was considered so essentially Semitic, that it almost appeared impossible to reconcile it with the fact of its origination by the Hamitic family, as related in Gen. x. 8. Yet it is now shown, by the lately discovered cuneiform inscriptions, that the earliest inhabitants of Babylon spoke some sort of Hamitic tongue, which was not only allied to the ancient Egyptian, but even to the language still found in Africa among the Galla tribes. For example, in the excavations conducted by Mr. Loftus, at Mugheir, many bricks have been exhumed bearing the name of a king whose title is everywhere read, "king of Ur, and king of Accad," thus confirming Moses in two distinct points of topography (Gen. x. 10). Moreover, one of these bricks was discovered, having stamped upon it the words—"The signet of Uruk king of Ur," and that in language essentially Hamitic rather than Semitic.

27. I respectfully submit that these observations offer an important ethnic testimony to the historical value of the writings of Moses. Much more might be added in the direction of verified topography, as (e. g.) the appearance of the names "Erech" and "Calneh" (Gen. x. 10), but space forbids.

(3.) *Canaan, before Abraham.*

28. There is exactly a similar difficulty in relation to this country; for at the earliest dawn of history the Canaanites are essentially Semitic. Yet Moses, in Gen. x. 6, gives them an Hamitic origin; and, in the absence of all monuments and historical records, we seem to be without the slightest means of accounting for this apparent discrepancy. One thing, however, indirectly bears witness to the Mosaic account, viz., the now generally conceded truth of Semitism having been a

gradual philological development from the older forms of the Turanian and Hamitic tongues.* Assuming that, in the confusion of tongues at Babel, certain germinal vocabular differences of four great parent stocks of language were first evolved, and that out of these—the Turanian being the primal fount—the Hamitic was first most rapidly crystallized, and that the Semitic and Aryan branches took a longer time for more completed evolution, we should then be in a position to understand how some of the Hamitic family might not only have gone forth from the dispersion of Babel into Canaan before the appearance of any grammatical Semitism, but afterwards have assisted themselves to evolve and establish it, even anterior to Abraham's arrival among them.

(4.) *Ancient Susiana, or Elam, before Abraham.*

29. There is a similar difficulty also in relation to this country. For, whereas Moses, in Gen. x. 22, derives Elam from Shem, the language spoken by the Elamites in the days of Abraham indicated a Scythico-Hamitic origin. It is true that, some centuries later, as every student of history knows, these ethnic elements disappeared under the Aryan conquests from Persia proper; but at the period of which I have just spoken, there can be no doubt, from the monuments of Susa, that the language spoken in Elam was Hamitic.† It will be remembered that Chedorlaomer (Gen. xiv.), whom Sir H. Rawlinson has identified with *Kudu-Mapula*, “the ravager of Syria,” was king of Elam; beside which, the name *Tirkhak* occurs on the Susa records, a name identical with Tirhakah, king of Ethiopia (spoken of in 2 Kings xix. 9), and therefore Hamitic.

30. It would be perplexing to account for this apparent discrepancy, were it not for the now recognized fact that the Hamitic speech was most closely allied to the original Turanian or Scythic, and that its evolution was made with comparative quickness, while it required a longer time for the evolution of Semitic. That Semitism should, therefore, have crystallized itself in Canaan on Abraham's arrival there, and at the same time that Hamitism should have been retained in Elam, presents us, in reality, with no contradiction.

31. I might take you also among the modern Hamitic

* Rawlinson says :—“The Turanian character of speech exhibited a power of development, becoming, first, Hamitic, and then, after a considerable interval, and by a fresh effort, throwing out Semitism.” (Rawlinson's *Herodotus*, vol. i., Essay XI., p. 531.)

† *Chaldaea and Susiana*, by Loftus, p. 98.

racés—to Congo, to Dahomey, and to other parts of Africa, where (as far as the argument drawn from serpent deification is concerned) much might be produced of an interesting character. But I am not disposed to lay so much stress on this point as many persons do, excepting only those pictorial traditions which I have noted in sections 9, 22, 37, 38, 46, and 47; consequently I now pass on to

III. THE SEMITIC NATIONS.

(1.) *Pre-Assyrian Chaldæa.*

32. Berosus, a native of Babylon, whose works are unfortunately lost, save a few small fragments preserved in Eusebius, wrote an elaborate history of Chaldæa from its earliest times, chronicling the most primitive records of his country. Now, it is a very singular fact that, in apparent contradiction to all other historical testimony, this writer introduces a Median dynasty of kings, who ruled for 224 years as conquerors of Chaldæa, ending B.C. 2234.* The circumstance of this early mention of the Medes, however (when usually they are not introduced into history till B.C. 647), furnishes us with a most remarkable ethnic testimony to the truth of Gen. x. 2, where *Madai* (the word used elsewhere for the Medes) is expressly named in the very earliest period after the Flood, and may therefore naturally have represented a primeval Median people.†

33. It was at this period, viz. B.C. 2234, that Berosus represented the first Chaldæan kingdom to be really established; and although, as I have already remarked, the Hamitic element was then to be found in it, yet it would be a mistake to divorce the Semitic element from it. Indeed, there is strong ground for supposing that this kingdom was, at a very early period, composed of a mixed people, representing the four constituent elements of human speech, viz., the Scythic or Turanian, the Hamitic, Semitic, and Aryan, about the gradual evolution of which I have already spoken. For, "the early kings," says Rawlinson, "are continually represented on the monuments as sovereigns over the '*four tongues*;' whence we may conclude that the people were distinguished from one another by a variety in their forms of speech."‡ Does not

* Rawlinson's *Five Great Monarchies*, i. 193.

† The history of Berosus, if we except one part obviously mythical, has been generally confirmed, and in no instance contradicted by the monuments.

‡ Rawlinson's *Five Great Monarchies*, i. 77-79.

this throw light upon the league of the *four* kings described in Gen. xiv., who united, in Abraham's time, to make war with the kings of Canaan?

34. Be that as it may, the Semitic elements of ancient Chaldæa are very obvious. Indeed, Babel itself, the very name of the capital, is Semitic, signifying "the gate of God." For as in Hebrew, *El* is the well-known root of *Elohim*, and of the Arabic *Allah*, so *Il*, or *Ilus*, is the emphatic Babylonian name for God.

35. Let us, then, take our ethnic testimony, gathered out of early Semitism, in favour of the Mosaic narrative. Who that is accustomed to trace analogies and sift evidence, can fail to acknowledge this in the primitive tradition of the Flood of Xisithrus—a tradition which even Baron Bunsen, with all his unsparing criticism, allowed to be common with that of the Hebrews.* I will not occupy my precious space by relating this story; but will simply sum up its main points of harmony with the Mosaic account, by quoting the words of Professor Rawlinson. This writer reminds us that the Babylonians were acquainted, not merely with the main facts of Noah's deluge, but even with its minutest points. "They know," says he, "of the Divine warning to a single man (Gen. vi. 13), the direction to construct a huge ship (vv. 14–16), the command to take into it a chosen few of mankind only (v. 18), and to devote the chief space to winged fowl and four-footed beasts (v. 20). They are aware of the tentative sending out of birds from it (Gen. viii. 7), and of their returning twice (vv. 9–11), but when sent out a third time returning no more (v. 12). They knew of the egress from the ark by removal of some of its covering (v. 13), and of the altar built and sacrifice offered immediately afterwards (v. 20). They knew that the ark rested in Armenia (v. 8), that those who escaped, or their descendants, journeyed towards Babylon (xi. 2), and that there a town was begun, but not completed, the building being stopped by Divine interposition, and a confusion of tongues" (vv. 4–9).

36. Speaking of Xisithrus, who is thus shown plainly to have been the Chaldæan Noah, it is remarkable also, that whereas Holy Scripture gives ten generations from Adam to Noah, Berosus makes exactly the same statement in reference to the antediluvian condition of Chaldæa, i. e. from Alorus to Xisithrus. The names are, of course, very different, and the recollection of them is localized; yet is it not wonderful that the proper number of links should have been exactly preserved?

* See *Egypt's Place, &c.*, vol. iv. p. 374.

(2.) *Assyria.*

37. Discoveries recently made among slabs, bricks, cylinders, and clay tablets belonging to the ruined cities of Upper and Lower Mesopotamia, have had the effect of so strongly confirming Scripture as almost to create a new science, viz., biblical archæology. It was not to be expected that many of these discoveries would bear upon facts so early as those contained in the Pentateuch. Such, however, as do so, afford the greatest witness to it, and this is all we can expect. When the book of Genesis, for example, says that Asshur, the son of Shem, "went forth and built Nineveh and Calah" (x. 11), we should naturally expect two things—first, to find Asshur, the founder of those ancient cities, deified in the national Pantheon; and, secondly, that both those cities would be distinct seats of empire at different periods of the national history. Well, such is exactly the case. Asshur, "the great God," stands everywhere at the head of Assyrian polytheism. He is sometimes called "Father of the Gods." He is always put first in invocations, and is regarded in all the inscriptions as the tutelary deity of the kings. In like manner, we find the monuments not only speaking of Nineveh and Calah separately, but Calah is evidently for a long time the capital, while Nineveh is only mentioned as a provincial town.*

38. In the Assyrian Pantheon we find also another god named *Héa*, the presiding deity of "the great deep," and the source of "knowledge and science." There is no means at present of determining the precise meaning of the cuneiform *Héa*, says Rawlinson; but "it may reasonably be supposed to be connected with the Arabic *Hiya*, which equally signifies 'life,' and 'a serpent'; for *Héa* is not only the god of 'knowledge,' but also of 'life'; and there are very strong grounds for connecting him with the serpent of Scripture, and the paradisaical tradition of the tree of knowledge and tree of life."† A further proof of this is given in Fergusson's *History of Tree and Serpent Worship*, ‡ where we have a Babylonian cylinder presented to us, on which there is the portrait of a man and woman seated on each side of a fruit-tree, both in the act of plucking the fruit; while, *behind the woman*, and with its head *close to the woman's ear*, stands a serpent on its tail.

* Rawlinson's *Five Great Monarchies*, vols. i. and ii.

† See Essay X. to Rawlinson's *Herodotus*, p. 493.

‡ P. 72.

(3.) *Phœnician Settlements.*

39. Without asking whether there was any identity between ancient Canaan and Phœnicia proper, we cannot omit to notice that there were various Phœnician settlements along the Mediterranean Sea. Of these, the isle of *Cyprus* was one. It is mentioned in Scripture under the name of Kittim,* the historical accuracy of which is preserved in *Citium*, the principal ancient city of that island. It is true that Chittim is first mentioned in Gen. x. 4, as a people descended from Japhet; but this no doubt speaks of the aboriginal race, and in no way disproves their subsequent displacement by Semitic colonization. A similar remark applies to the island of *Rhodes*; the inhabitants of which seem referred to by Moses in the same verse, where the margin reads *Rodanim*. And, again, to the *Libyans*, who may aboriginally be identified with the *Lehabim* in Gen. x. 13.

40. Every one has heard of the Tyrian or Phœnician purple dye, prepared from the shell of the murex. Does not this throw light on Deut. xxxiii. 19,—“Of the treasures hid in the sand shall they suck”?

41. Again, the only Phœnician writer, even the barest fragment of whose remains are extant, is Sanchoniathon, according to whom we have an interesting testimony to the Mosaic cosmogony. He tells us that the beginning of all things was a gloomy air and thick dark chaos existing without ages (comp. Gen. i. 1, 2). The beginning of the creation of all things was the agitation of this air, which produced a watery, muddy mixture (comp. Gen. i. 1–3). From this shone forth the sun, moon, planets, and stars; and the air being illuminated, and the earth and sea violently heated, clouds and winds arose. Hence storms of thunder and lightning, at the sound of which intelligent creatures awoke and moved by land and sea. And lastly two mortals were formed, the progenitors of all mankind.† The similarity between this and the Mosaic cosmogony cannot be overlooked. Again, this writer states that the Supreme God of the Phœnicians was *Eliun*, which is the very name Moses gives in Genesis (xiv. 18) as that by which Melchisedec served Jehovah. This testimony is very remarkable.

We must now turn to the last section of our subject, viz.—

* “Isles of Chittim” was, however, the Hebrew phrase for Western Europe.

† Kenrick’s *Phœnicia*. Also Sanchon. apud Euseb. *Præp. Evan.*, lib. i. c. 10.

IV. THE ARYAN NATIONS.

42. These nations having had their ethnological centre in the East, around the banks of the river Indus, I begin with—

(1.) *Hindustan.*

43. Nothing is clearer, in the study of this portion of Aryan ethnology, than that the farther we recede, chronologically, the purer and more monotheistic becomes its religious faith. How striking, for example, is the following extract from one of the most ancient of its sacred books, the *Geeta*, written at least B.C. 2000, when put in contrast with the later forms of Brahminism. It is an invocation to the Supreme Deity :—"Thou, O mighty Being, greater than Brahma, art the prime Creator, eternal God of Gods, Thou art the Incorruptible, distinct from all things transient. Thou art before all gods. By Thee, O infinite Form, the universe was spread abroad." Is it not a presumable inference that notions such as these were carried away eastward by some of the first descendants of the Noachic family, and cherished in all their freshness for a few centuries by the earliest settlers? At all events, does not an ancient monotheistic creed such as this witness to the monotheism of the Pentateuch, with which it was certainly coeval?

44. If this be true, we should expect to find from the same source some form of mythological or traditional representation of the destruction of mankind by a deluge. Nor are we disappointed. For in what is called the *Bhagvat Geeta* we read of the incarnation of Vishnu, in which the god is described as saying—"As often as there is a decline of virtue, and an insurrection of vice in the world, I make myself evident. And thus I appear from age to age for the preservation of the just, the destruction of the wicked, and the establishment of virtue." These books describe several such incarnations. One of them, the *Matsya Avatar*, translated by the late Sir William Jones in his *Asiatic Researches*, is so singularly confirmatory of the Deluge of Noah, that it almost seems impossible, with anything like candour, to refuse belief in their identity. It begins by stating that there was once a "general destruction occasioned by the sleep of Brahma, by which his creatures were drowned in a vast ocean." It arose from the circumstance of Hayagriva, a strong demon, stealing the sacred Vedas; on the discovery of which Vishnu assumed the shape of a fish. It then goes on to say that, "A holy king, Satyaurata, then reigned. As this pious king was making a libation, Vishnu, under the form of this fish, appeared to him, gradually assuming a larger bulk. When Satyaurata beheld this he addressed the deity in a sublime prayer, who, out of pure

compassion to him, intending to preserve him *from the sea of destruction caused by the depravity of the age*, answered,—‘In seven days the three worlds will be plunged in an ocean of death; but in the midst of the waves a *large vessel*, sent by me for thy use, shall stand before thee. Then shalt thou take all medicinal herbs and a variety of seeds, and, *accompanied by seven saints*, encircled by *pairs of all brute animals*, thou shalt enter the vessel, and continue in it *secure*.’ He spake and vanished. Satyaurata waited the awful event; and while he was performing *grateful sacrifices* the sea deluged the earth, augmented by *showers from immense clouds*. Alarmed at the violence of the waves the pious king invoked assistance, when the god again appeared in the form of a fish, now of blazing gold, extending a million of leagues, with one stupendous horn, on to which the king fastened the ship with a cable made of a serpent.”*

45. Comment upon this is superfluous. The italics are surely enough to exhibit its identity with the account given in the Pentateuch.

46. The mention of the word serpent in the preceding story, reminds me of a tradition of the Brahmins respecting Krishna, who defeated *Kalli Naga*, the serpent with a thousand heads, after he had poisoned the river Jumna, tearing off his heads one after another and trampling them under his feet, after which the poisoned waters became pure.† This Krishna was vulnerable only in the *sole* of his foot.‡ Nay, there are actually two sculptures of this god which approach to an exact verification of Gen. iii. 15; one of Krishna *suffering*, in which he is represented as enfolded by an enormous serpent *biting his heel*; the other of Krishna *triumphant*, in which he is represented as *trampling on the serpent’s head*.§ Can any analogies be more striking than these?

47. Sir William Jones, in his preface to the *Institutes of Menu*, which he assigns to B.C. 1280, tells us that, in the first chapter of that work, the Deity is represented as first creating *waters*, called *nara*, because they were the product of *Nara*, or the spirit of God; and that because they were His first *ayana*, or place of motion, He is called *Narayana*, or “*moving on the waters*.” The same author, together with Lieut. Wilford, in *Asiatic Researches*, informs us of several other most wonderful testimonies to the Mosaic writings. Mount Meru, for instance, is believed to be a celestial earth, and the abode of the immortals, upon the top of which a vast river falls out of the feet

* *Asiatic Researches*, vol. i. p. 234.

† Maurice’s *Hist. Hind.*, vol. ii. p. 276.

‡ *Ibid.*, vol. iii. p. 88.

§ *Ibid.*, vol. ii.

of Vishnu, dividing into *four streams*, which streams rush up from an enormous *tree* that is thought to *convey knowledge*.* The same volume states that Brahma becoming incarnate, produced the first woman, Satarupa or *Iva*, out of one-half of his body, and the first man, Swayambhuva or *Adima*, out of the other half. This pair had three sons, one of whom *slew his brother with a club while performing a sacrifice*.† Another volume gives the Hindu belief of a patriarch named Dhruva, who lived on the banks of the Jumna, devoting himself to divine contemplation and religious austerities; and who, on account of his extraordinary holiness, did not die, but was *translated to heaven*, where he now shines as the polar star.‡ And the same volume tells us, from the *Padma-Parana*, that Satyaurata (whose preservation from the deluge I have before recounted) had three sons, the eldest of whom was named Jyapeti. The others were Sharma and C'harma. To the first of these he allotted all the regions north of Himalaya, and to Sharma he gave the country on the south. But he cursed C'harma, because when the old monarch was accidentally inebriated with a strong liquor made of fermented rice, C'harma laughed.§ Whatever the exact date of these Puranas may be, they are unquestionably both ancient and indigenous. Hence the testimony which Hindustan furnishes to the Pentateuch becomes irresistible.

48. The same remark applies with still more force to another and more celebrated composition of purely indigenous growth, viz., the great epic poem named the *Mahâbhârata*, the chief topic of which is the history of the Naga, or Serpent race, and which opens, exactly like the Pentateuch, with a *curse* upon the serpent. It is even still more curious that in both instances the same form of expression is used. For, whereas, in the Pentateuch the serpent itself is cursed as the representative of the Evil Spirit which lay behind it, so in the *Mahâbhârata* the curse is on the reptile itself, instead of being on its worshippers. This is noticed by Fergusson as a remarkable coincidence.|| Yet it really is no more so than many other coincidences which are chronicled in this paper.

(2.) Greece and Rome.

49. Was it mere poetic fancy which led Hesiod to sing of that golden age—

“When gods alike, and mortals rose to birth;
The immortals formed a golden race on earth?”

* Vol. vi. pp. 436–493.

† Maurice's *Hist. Hind.*, pp. 472–477.

‡ *Asiatic Res.*, vol. v. p. 522.

§ *Ibid.*, vol. v. pp. 256–312.

|| Fergusson's *Tree and Serpent Worship*, p. 59.

It was certainly not deemed mere mythological fable by the ancient Greeks and Romans, for the deepest philosophers and best historians refer to it as an old traditional truth. Plato says, "The men of that time (γῆγενες, i.e. 'earthborn') were ten thousandfold happier than those of the present."* Tacitus writes, "The first race of men, free as yet from every depraved passion, lived without guile and crime, and therefore without chastisements; nor was there need of rewards, when of themselves they followed righteousness."†

50. Was it a mere accident which led Plato to describe man's origin in words which were the very echo of the language of Moses? "Our nature of old was not the same as now. It was then one man-woman, whose form and name were common both to male and female. Then, said Jupiter, 'I will divide them into two parts' "‡ (comp. Gen. ii. 22). Was it a mere coincidence which made Hesiod's genius fall in with that of Moses in relation to the garden of the Hesperides, and to the serpent which guarded its golden apples?§ (comp. Gen. iii. 1-3). Who forgets Pandora, the first created woman, made of clay, and endowed by the gods with every personal charm, who, by looking into a casket which Jupiter had forbidden her to open, brought into the world evils, diseases, and sorrows—hope alone remaining? Was this a lucky hit of independent fancy, by which the Greeks, in utter ignorance of any primitive tradition, mysteriously painted almost the selfsame picture as Moses? In that case the credulity of the sceptic is certainly stronger than the faith of the Christian. And yet how much more might be added of the same kind! Why, for example, did Homer make Neptune say—

"We are from Cronus and from Rhea sprung,
Three brothers; who the world have parted out
Into three lots." ||

Or, why did the Greeks regard *Japetus* as the ancestor of the human race? or make *Vulcan* the originator of working in iron and brass? Was it accident which thus reproduced the Tubal Cain of Gen. iv. 22; and the Japhet of Noah; and the threefold parentage of states through his three sons? I can only say, that if blind chance produced these most singular analogies (although they are no more singular than those adduced from Hindustan), then all the laws which govern

* Plat., *Polit.*, c. 15, 16.

† Tacitus, *Ann.*, iii. c. 26.

‡ Plat., *Sympos.*, c. 14, 15. § Hes., *Theog.*, v. 333. || Hom., *Iliad*, xv. 187.

inference and evidence must be completely shaken, if not shattered.

51. But I proceed. The Jews were known to the heathen by their reverence for clouds. Thus, Juvenal says, "They worship nothing but clouds, and the divinity of heaven." * This is in accordance with such passages of the Pentateuch as Exod. xiii. 21, Lev. xvi. 21, Numb. x. 34, Deut. iv. 16. Again, Moses, in Leviticus xiii. 22, permits the Israelites in the Arabian desert to eat locusts. That this was historically probable, many ancient authors, both Greek and Roman, bear witness. Strabo says, "There is a people of Arabia whose food consists of locusts. . . . They are pounded with salt, made into cakes, and eaten." † Moses also speaks in Numb. xi. 5, of the onions and garlic which Israel freely ate in Egypt. The historical accuracy of this is vouched for by Herodotus; who says, "On the outside of the pyramid of Cheops were inscribed in Egyptian characters the various sums of money expended in the progress of the work, for radishes, *onions*, and *garlic* consumed by the workmen." ‡ Pliny also says, "*Garlic* and *onions* are invoked by the Egyptians when taking an oath." § Of the testimony which this race of writers bears to the passage of the Red Sea by Israel, the following remarkable passage may not be deemed without interest. Strabo says, "The people of Ptolemais had engaged in battle with Sarpedon, and after a signal defeat were left in this place, when a wave from the sea, like the rising tide, overwhelmed the fugitives; some were carried out to sea and drowned; others perished in hollow places; then again, the ebb succeeding, uncovered and displayed to sight the bodies lying in confusion among dead fish." || To the exodus of Israel out of Egypt there are several testimonies, although some of them are bungled and blemished by admixture with extraneous circumstances.

52. Thus Herodotus says of the people of Palestine, "They once inhabited (*according to their own account*) the coasts of the Red Sea; but migrated thence to the maritime parts of Syria." ¶ Diodorus Siculus says, "In ancient times there happened a *great plague* in Egypt, and many ascribed the cause of it to God, who was *angry with them*, because of strangers in the land, by whom *foreign ceremonies* were employed in *religious worship*." He then describes, as a consequence, the expulsion of these strangers; first naming the

* Juv., *Sat.*, xiv. 97.

† Herod., ii. 125.

|| Strabo, xvi. c. 2.

† Strabo, xvi. c. 4.

§ Pliny., *Hist. Nat.*, xix. c. 32.

¶ Herod., vii. c. 89.

colonization of Greece by Danaus and Cadmus, and then the settlement of the Jews in Canaan;—adding, “These emigrants were led by Moses; who was superior to all in wisdom and prowess. He gave them laws, and ordained that they should have no images of the gods, because there was only one Deity.”* Of the destruction of Sodom and Gomorrah, we have a curious passage from the pen of Tacitus, which witnesses that, in his judgment, the facts of the Mosaic narrative were true. “Not far from the Red Sea lie desert plains, such as they report to have been of old, a fruitful country, full of populous cities, which were consumed by lightnings and thunderbolts.” He then adds, “To speak my own sentiments, I must allow that cities, once great and important, were here burnt by fire from heaven, and that the soil is infected by exhalations from the lake.”†

53. Let me now add a few words, about the tradition of the Greeks respecting the Deluge; a tradition which, like all others, is primarily local (belonging probably to Thessaly), yet is so mixed up with elements which are peculiar to the Deluge of Noah, that it is impossible not to perceive their original source. I take it from the pen of Lucian, who, as a bitter enemy of the Jews, would not have recorded it out of any conscious desire to bear testimony to their authority. He gives it as a purely Greek tradition. “Concerning the first race of men, they relate that they were very obstinate and did very wicked things, and had no regard to oaths, had no hospitality or charity, upon which account many calamities befell them. For, on a sudden, the *earth sent forth* abundance of water [Gen. viii. 2], *great showers of rain* fell [Gen. viii. 2], and the sea *overflowed the earth* [Gen. vii. 19], so that all was turned into water, and *every man perished* [Gen. vii. 23]. Deucalion only was saved alive to raise up another generation, because of his prudence and *piety* [Gen. vi. 9]. He was preserved thus:—he, his wife, and children entered into a large vessel which he had prepared [Gen. vii. 7]. After him went in bears, horses, lions, serpents, and *all other kinds of living creatures, two and two* [Gen. vi. 19; vii. 9]. This is the account the Greeks give of Deucalion.”‡ Plutarch, another Greek writer, speaking of the same tradition, says that Deucalion *sent a dove out of the vessel*” § (Gen. viii. 8). Now in this particular deluge of Thessaly, it is very improbable that any such precise analogies with those of Noah’s Deluge should have occurred. But if the Greeks had received

* Diodorus Sic., xl, apud Photian. † Tacit., *Hist.*, v. c. 7.

‡ Lucian, *De Dea Syria*.

§ Plutarch, *De Solertia Animalium*.

the Hebrew tradition through the dispersion from Babel, nothing would be more natural than that they should have blindly mingled the two stories, just as we had reason to suppose the Chaldeans did in the account they did of Xisithrus, and as the Mexicans did in the account of Coxcox.

54. As another Greek testimony on this point, I may mention that the Apamæans living in Armenia possessed coins in honour of the Emperor Septimius Severus, having on the reverse the figure of a chest, with a man and woman standing before it, and two doves above it, one of which is flying with a branch of a tree in its mouth. Which money, though it was coined long after the birth of Christ, yet being the work of a heathen empire, plainly shows that the same tradition as that just narrated was well known and believed. *

(3.) *Scandinavia and Britain.*

55. That the great Keltic and Teutonic races came originally from the East, is a fact so abundantly proved, and now so universally acknowledged, that I need not do more than allude to it. Under such circumstances we may naturally expect to find their mythology and traditional beliefs, though moulded differently in various places, by means of climatic or other influences, to be yet substantially primeval. And so we do. Like the Persian system (of which I have not had time to speak) the Scandinavians believed in the existence both of an evil and a good principle acting in perpetual antagonism. The former, named *Loki*, is called in the *Prose Edda* of Iceland, "calumniator of the gods, the grand contriver of deceit and frauds, the reproach of gods and men." One of his children was *Midgard*, the Serpent, whom the All-Father threw to the bottom of the ocean; and who, having grown to an enormous size, wound himself round the earth,"† This evil was symbolized by the old dragon or serpent power, which first came from the primitive recollections of paradise. The latter (called *Alfadir*, "All-Father") is the subject of the following interesting discourse in the first part of the Icelandic Prose Edda:—

"Gangler began—'Who is the first or oldest of the gods?' 'In our language,' replied Har, 'he is called Alfadir; but in the old Asgard he had twelve names.' 'Where is this God?' said Gangler. 'What is his power, and what hath he done to display his glory?' 'He liveth,' replied Har, 'from

* See Ray's *Physico-theological Discourses*, who gives a copy of this interesting coin from Octav. Falcon., *De Nummo Apam. Deucal. Diluv.*

† Mallet's *Northern Antiq.*, c. v.

all ages ; he governeth all realms, and swayeth all things, great and small.' 'He hath formed,' added Jafnah, 'heaven and earth, and the air, and all things thereunto belonging.' 'And what is more,' continued Thridi, 'he hath made man, and given him a soul which shall live and never perish, though the body shall have mouldered away.' " *

56. In the same book we find various other confirmations of primitive tradition. There is one (e. g.) which looks exactly like a compendium of the antediluvian history of the Pentateuch, describing a first race of men, and their working in metals, in an age called "The Golden ;" but which was afterwards corrupted by the arrival of women out of Jötunheim (comp. Gen. vi.). Of the creation of the first man and woman, it says, "One day, as the sons of Bör were walking along the sea beach, they found two stems of wood, out of which they shaped a man and woman. From these two descend the whole human race." In another account we get quite as decided, though equally as distorted, a view. The elements, in a chaotic state of gloom and frost, are described as melting into drops under vivifying heat, which gradually assumed a human semblance (comp. Gen. ii. 7), and produced the giant Ymir. Immediately after this was found the cow Audhumla, from whom ran *four* streams of milk, to feed Ymir (comp. Gen. ii.). As the cow licked the stones round about her, other beings were formed ; whence came Bör, Odin, Thor, &c. Connected with the history of the sons of Bör stands the Scandinavian account of the Deluge ; for they are said to have slain the giant Ymir, whose blood, pouring forth, drowned the whole world *except one*, who saved himself *with his household*. Thor's exploits, too, remind one of the hoped-for Mediator ; for he is said to have *wrestled with Death* (one of Loki's children) and to have *fought the Serpent*, Midgard, both of whom were the direct impersonations of evil.

57. Of ancient Britain, which will be my last witness, I can only let the Druidical Triads speak, taken from the second volume of the *Welsh Archæology*, and translated from the oldest Welsh MSS. They are extracted from the book of Caradoc of Nantgarvan, and from the book of Jevan Brechva in 1601.† Strange to say, we have the same testimony to an

* The *Prose Edda*, in its present form, dates from the thirteenth century, but embodies the belief of the nation from the *Poetic Edda*, which is much older ; it crystallizes the traditions brought from the East, only thrown into the national forms of Scandinavian thought and feeling.

† This series bears the following title :—"These are the Triads of the island of Britain,—that is to say, Triads of memorial and record, and the information of remarkable men or things, which have been in the island of Britain ; and of events which befell the race of Cymry from the age of ages."

universal deluge in these Triads; one of which speaks of "the bursting of the lake of waters, and the overwhelming all lands; so that all mankind were drowned, excepting Dwyvan and Dwyvach, who escaped in a naked vessel without sails; and of them the island of Britain was *repeopled*." In another of these Triads, on the three chief master-works of Britain, we have first on the list, "the ship which carried in it a male and female of all living, when the lake of waters burst forth."

58. Davies, in his *Mythology of the British Druids*,* gives the whole legend as follows:—"The *profligacy* of mankind provoked the Great Supreme to send a pestilential wind upon the earth [Gen. vi. 5]. At this time the patriarch, distinguished for his *integrity* [Gen. vi. 8, 9], was *shut up* together with his select company in the enclosure with the strong door [Gen. vii. 16]. Here the just ones were safe from injury. Presently a tempest of fire arose. It split the earth asunder to the *great deep*. The lake Llion burst its bounds [Gen. viii. 2]; the waves of the sea lifted themselves on high; the *rain poured* down from heaven and the water covered the whole earth [Gen. viii. 2]. This flood, which swept away from the earth the expiring remains of the patriarch's contemporaries, raised his vessel from the ground, bore it safe on the summit of the waves, and proved to him and his associates as the water of life and renovation."

59. I could, of course, on a theme so vast as this, have easily amplified the treatment of it. I have purposely omitted much: such as the existence of analogues to the Hebrew "cities of refuge" (Deut. iv. 41-43) among the Affghans, and some of the North-west American Indians; the very common practice of "circumcision" in different parts of the globe (Gen. xvii. 10); and the custom of "divination by rods" (Exod. vii. 20-22, Numb. xvii. 1-10, &c.), as found in usage by the Greeks and Scandinavians. I should like also to have adduced evidences of a great underlying principle of primitive monotheism which pervades almost every nation, ancient and modern, however sunk in idolatry; but that being too important to be hurried over, I must leave as a totally distinct branch of evidence upon the subject, and take it up, if spared, on some other occasion.

60. For the present I must cease. All these ethnic testimonies, when accumulated, form, in my judgment, a strong and powerful argument. They are like the fossil bones of some old ichthyosaurus, many of which may be broken and

* P. 228.

disjointed, part being found in one spot and part in another, but which, when compared together and classified, and as far as possible reconstructed, are quite sufficient to convince the skilful palæontologist that they are segments of one great original. In like manner all the traditions, mythologies, writings, inscriptions, paintings, &c., are so many excavated relics of primeval history, which, though often broken up and disfigured, and found among a vast variety of nations, yet when carefully examined and scientifically arranged, become capable of such reconstruction as to satisfy the ethnologist that they are parts of one authentic original. Assuming, then, as I hinted at first, that the Pentateuch is both authentic and genuine,—facts which I trust none of you dispute,—we have in this line of argument an ethnic testimony to its accuracy which cannot but confirm and consolidate our faith, and which at a time like the present, when the Pentateuch is assailed both by critical and scientific scepticism, must be very consolatory to timid and doubting hearts.

The CHAIRMAN.—Ladies and Gentlemen, it is my duty as Chairman—and I do it from my heart—to move a vote of thanks to Mr. Titcomb for his most excellent lecture. If our cumulative votes could be brought to bear on him as his cumulative evidence has been brought to bear upon the subject before us, I think he would stand very high indeed. (Cheers.)

Captain F. PETRIE, Hon. Sec.—Before the discussion commences, I have to state that Mr. Gosse, one of our Vice-Presidents, has sent me a communication with regard to the subject of the paper just read, and, with your permission, I will read it.

“I regret that I shall not have the opportunity of hearing this paper read. I hail it with great satisfaction : it is most admirable and most valuable ; its only fault is its *shortness*. But I venture to express an earnest hope that the esteemed author will dig still deeper in this rich mine, and lay before the Victoria Institute more of these treasures of ancient lore, which I believe are almost exhaustless ; treasures of historic confirmation of the Word of God, of great value, because of their absolute freedom from all suspicion of collusion with Hebrew authorities. The force of this sort of evidence is cumulative : therefore, the more we can accumulate, the better. I venture to ask a few questions on some points of detail.

“In section 4, and *passim*, the author reckons the Phœnicians in ‘the Semitic family.’ But if the Bible is true, the Phœnicians were not descended from Shem, but from Ham ; for Sidon was the first-born son of Canaan (Gen. x. 15, 19). Perhaps the affinity of the Phœnician *language* to the Hebrew is intended ; but language is one thing, family another. That language is meant, I gather from sections 28 and 29 ; where it is stated, as ‘a generally conceded truth, that Semitism was a gradual philological development from the older forms of the Turanian and Hamitic tongues.’ It is not the truth of what is the predicate here (the priority of other tongues to the Shemitic) that I am mooting ;—perhaps something might be said on the other

side ;—but the propriety of the terminology. In Elam we have a people of Shemite lineage (x. 22) speaking a ‘Hamite’ tongue (section 29) ; as, in Sidon, a race of Hamite lineage (ver. 15) speaking Shemite. This is a matter well worthy of elucidation ; and loudly calling for it ; because, else, to believers in Revelation, there seems confusion between lineage and language. I am aware that facts appear to warrant such appropriations of language to nations ; but it is desirable that a nomenclature of scientific philology be adopted, which would avoid the use of the names of Noah’s sons,—‘Shemitic,’ ‘Hamitic,’—while it would leave the field open for proof of the appropriation of certain linguistic branches to them. If however, the Pentateuch is true (and this Mr. Titcomb assumes at outset, while his whole scope is to confirm it), diversities of language did *not* originate with those antediluvian patriarchs ; for, after the Deluge (and *long* after, I presume from the phrase, ‘the *whole* earth,’ xi. 1, 6), there was still but one language.

“In section 34, Babel is given as Bab El :—this is ingenious ; but it is one of those etymologies, which every language knows, wonderfully striking and plausible, yet on severe examination demonstrably false. In this case it is not an open question,—if we accept the inspiration of the narrative, which the author grants ; for another derivation is authoritatively given,—‘*because* Jehovah did there confound’ (mingle, כָּלַל) the language of all the earth (xi. 9). The ‘Gate of God,’ moreover, seems an unmeaning term : why a *Gate* on the plain of Shinar ? Gate, to what ?

“The fact given by Prof. Rawlinson (section 38) that there is in the Assyrian mythology a god named H^éa, with the characters mentioned, is one of high interest ; like so many of those which Mr. Titcomb has gathered. Is not, however, the allusion, in H^éa, a little misread ? Is not the origin of this word (=Hiya in Arabic), not the serpent, but Eve, חַוָּה, connected as the latter word is with חָיָה, to live—‘*because* she was the mother of all living ?’ She, too, was the first human possessor of that ‘knowledge and science’ (Gen. iii. 5) which was so fatal a purchase.

“I remain, yours,

“P. H. Gosse.”

Mr. A. V. NEWTON.—In the able paper which Mr. Titcomb has just read to us I do not find any reference to the Runic Crosses of Ireland. Mr. Fergusson, I understand, holds that these crosses are curious relics of antiquity, and of very ancient date ; if this be so, I think they will serve as still further illustrations for this paper. A friend of mine, who has lately given considerable attention to these crosses, and studied them with the view of pointing out their peculiar features, agrees with Mr. Fergusson in considering that they are of very ancient date. In a very rare and costly work on them, there are, if I mistake not, three instances of Adam and Eve (on the panels of those crosses) represented as eating the forbidden fruit. There is also a representation of Cain striking down Abel, adjoining Adam and Eve, in the same panel. There are likewise on two of the crosses, representations of the children in the fiery furnace. Now, if these be really ancient crosses, they form a very curious illustration of Mr. Titcomb’s text. But then comes something else which is also very curious. If they be crosses erected before the Christian era, we have some puzzling things to get over : there is evidently a last judgment depicted on more than one of them, and there is also a crucifixion on three or four ; and so clearly is the crucifixion represented on one of them that I fancy I can detect

the sponge offered, and also a spear in the hands of an attendant. If the age of these crosses were certainly an age anterior to Christianity, there would then be an argument which would go greatly against much of the evidence which Mr. Titcomb has so industriously brought together. I merely throw out these remarks for discussion.

The following are some of the Scriptural Subjects illustrated on the Runic Crosses :—

- “ On east side of S.E. cross Monasterboice (about 34 miles from Dublin, in county Louth) is shown in one panel Adam and Eve, and in another the last judgment; and on west side of same cross is a crucifixion.
- “ Tuam cross has a panel illustrating a crucifixion.
- “ Termonfeckin cross (county Louth) shows a crucifixion (very rude).
- “ Cross in churchyard at Kells (county Meath) shows in one panel Adam and Eve and Cain and Abel, and above this panel the children in the fiery furnace.
- “ East side of Arboe cross (county Tyrone), Adam and Eve, Abraham's sacrifice, and the children in the fiery furnace.
- “ The east side of the cross at Drumcliff (four miles from Sligo), Adam and Eve, the serpent, and the tree, finely sculptured. Also the last judgment. On the west side a crucifixion.”

MR. TITCOMB.—May I ask in what way the crosses you mention would go against the main body of my paper? I do not see how they can affect my evidence at all.

MR. NEWTON.—The evidence of these Runic Crosses might go thus far, we should find on crosses erected before Christianity that there existed pictures or representations of scenes which are to be found in the New Testament.

MR. TITCOMB.—But that is assuming that the crosses were erected before Christianity existed.

MR. NEWTON.—Precisely so; I only build up my argument upon that. But I believe I have Mr. Fergusson's evidence, and also the evidence of that other gentleman of whose judgment I have the highest opinion. I have their belief that these are very ancient crosses; and if we find that they are pre-Christian crosses, and that they contain clear illustrations of the last judgment and of the crucifixion, then it is possible that many of the illustrations given in the paper before us may bear another and a very different interpretation from that which we are now inclined to put upon them.

THE REV. C. GRAHAM.—I should like to make one or two observations upon this subject. As to what has fallen from Mr. Newton I would say that a cross is now generally a thing connected with Christianity. Christianity has suggested the making and setting up of crosses. I think that you will find, in Ireland, these crosses are all venerated, and in some instances

worshipped, by the Roman Catholics, who claim them as their property. If it be true that you find a sponge and a spear upon them, that is decisive.

Mr. NEWTON.—On one of them?

Mr. GRAHAM.—Well, if they be found on one, it is rather presumptive evidence that they are all of the same character, and they are not calculated to invalidate the testimony adduced by Mr. Titcomb, whom I thank very much, for his excellent paper, for there is a vast amount of information concentrated in it: though short, it is a very instructive paper. Mr. Titcomb did not intend to make it exhaustive, but comprehensive. Now I must say that I thoroughly go with Mr. Gosse in his criticism on the word Babel. I do not think we can admit the derivation of "Gate of God." There are some who derive it from the Gate of Belus, but Mr. Gosse points out that you have its true derivation in Genesis itself, where we are told that God confounded the language of man, and so the place they were building was called Babel, as Gesenius says, for Balbel, or the confounded. This seems to me to be quite sufficient. Then have we not many scriptural words reproduced in mythology? For instance, take the name of Jehovah, the Supreme God. What is Jove but a corruption of Jehovah—Jehovah in another form? If you take it in Greek in another form, you get Ζεύς, from Ζωή, life, which gives you the radical idea of Jehovah, or the one who is, who was, and who is to come, on which account the Jews tell us that the three ideas of past, present, and future are contained in the word Jehovah. Then take another word, Erebus, which the poets tell us is that state or place between Tartarus and Elysium, where there is a sort of mixture of light and darkness. Erebus, evening or twilight, a flickering of light, from which comes Arab. Then take another word, the derivation of which is not so clear, ἡδονή, sweetness, but which seems to be taken from Eden. Apollonius tells us that the name of the serpent that guarded the apples of the Hesperides was Ladon, or El Adon, the God of the Garden of Eden, and Apollonius has written some very beautiful lines on that subject. As to the Hesperides themselves, many derive them from two Hebrew words, ets peri, a tree of fruit, which gives you the idea at once of the tree of apples guarded by the serpent Ladon. There are many other interesting matters which might be pointed out in connection with this subject, and it is very desirable that strangers interested therein, and able to give us a little light, should take part in our discussion. I now come to the expulsion of Adam from Paradise. After he was expelled, "Cherubims and a flaming sword" there were placed at the east of the Garden. Now have we not the reproduction of "Cherubim" in classical mythology, and in Egypt and Assyria? In one instance we have the Egyptian god Kneph, the exact name for the wing of a cherub—the Hebrew Keneph. With regard to Japetus, I agree with Mr. Titcomb, that there we have the Japhet of Noah. He was the father of mankind according to the Greeks, and we all believe that Europe was chiefly peopled by the descendants of Japhet. There are also one or two other points which I should like to notice. Take Pandora. It means, as you know, every gift—*πᾶν δῶρον*.

Pandora is a representative of Eve, and we are all of opinion that Eve was the most beautiful of women. Milton tells us, and we agree with his thought, that she was "the fairest of her daughters." It is a strange expression to make Eve one of her own daughters. (Laughter.) You have the Greek idea of Eve in Pandora. But here is a point which is very remarkable. Any one who remembers Ovid's description of the creation of man, will recollect that he states that man was made in the image of God. That is precisely a reproduction of the very language that you find in the book of Genesis. Now in relation to the Flood, let me refer again to Ovid; for this is very interesting—it is a grand moral fact which Mr. Titcomb has very forcibly brought out. The Flood generally is represented as coming on account of man's wickedness. You have the moral idea contained in Genesis. God destroys man from the face of the earth by the waters of the flood because "all flesh had corrupted his way upon the earth." Now when Jupiter is represented as calling a council of the gods, this is what he insists on, that man had become so corrupt that he must be destroyed from the face of the earth. Jupiter's first idea is to destroy him by lightning, and he seizes his thunderbolts and is ready to hurl them and consume mankind, but he remembers that it is written in the records of the fates that a day will come when, the heavens taking fire, and the earth catching the flame, both will be dissolved. Then he lays down his dread thunderbolts and destroys the earth by a flood of waters. Now can this be a mere matter of chance coincidence? I think you will say that the coincidence is quite of another character, and that the poet really borrows matter which, whether it came to him traditionally or still more directly, is from the revelation of God. Just let me point out one other fact which I wish to commend to Mr. Titcomb's notice. It is with regard to the destruction of Sodom and Gomorrah. Though the testimony quoted from Tacitus by Mr. Titcomb is forcible, yet Tacitus tries to account for the destruction of the cities in a fruitful country, near the Dead Sea, on natural principles. But this fact is very remarkable: in the 8th book of Ovid's "Metamorphoses" you find the account of the destruction of a rich and populous country in Phrygia, and you have almost all the circumstances as given in Genesis, repeated by Ovid. You have Jupiter and Mercury disguising themselves, and coming down to earth in the form of men. They inquire as to the condition of mankind in that region, and they find that the people despise the gods, and that evil has increased among them to such an extent that it is not suitable that they should be allowed to live any longer. Jupiter and Mercury go to the house of two devout persons, worshippers of the gods—Philemon, and Baucis his wife. They spend there that length of time which just accords with the time spent by the angels in the house of Lot at Sodom; and they say that that region is about to be destroyed on account of its wickedness, and recommend Philemon and Baucis to repair to an adjoining mount. They help them away from the place, and when they come within a bow-shot of the summit of the mountain, Philemon and Baucis look back and see the whole region round sunk in a morass. This morass answers to the Dead

Sea. But the more this subject is pursued the more the evidence accumulates, and the more we shall find that the foundations of Divine truth are stable and indestructible. (Cheers.)

Rev. H. MOULE.—I beg to express my grateful acknowledgments to Mr. Titcomb for the valuable testimony brought together in his paper in confirmation of the truth of the Pentateuch. At the very commencement of our proceedings, I stated more than once to our late lamented Honorary Secretary my conviction that something of this kind would be found needful. We must show, as in countless instances we can, not only that the facts of science and of history are not opposed to the facts and truths recorded in Scripture, but that they tend, when both are rightly understood, greatly to confirm them. At the same time, while long accustomed to investigate such subjects with thorough independence of mind, I have increasingly felt the need of caution, especially when one's information is to be derived either from the hieroglyphic language of Ancient Egypt, or from the complicated and difficult language of China. Under this feeling and for two reasons which I will adduce, I hesitate to accept the correctness of so apparently precise a statement from the book *Liki*, that "all these evils" (of a deluge) "arose from man's despising the Supreme Monarch of the Universe." First, in the writings of Confucius, scarcely any trace can be found of the idea of a personal God, "a Supreme Monarch of the Universe." Secondly, there is a remarkable inscription on the monastic buildings of the Roman Catholics, in the city of Hangchow, and set up by an Emperor, who for a time forcibly took possession of those buildings and dedicated them as a Palace of the Queen of Heaven; in which inscription, when setting the Chinese religion in contrast to the Roman Catholic faith, he distinctly asserts that in that religion there is no idea of a personal God.* In referring to the monu-

* Since the discussion, I have referred to that which I consider the best existing authority on such a subject, the translation of the Chinese Classics with notes and prolegomena, by James Legge, D.D., of the London Missionary Society; and there I find not only support of the view which I have taken, but such strong confirmation of Mr. Titcomb's general statement of the testimony from China that I must ask leave here to reproduce it. He first gives Dr. Morrison's general statement that in the *Shoo-king*, "after a fanciful account of the creation, there follows a period of Chinese civilization when Fuh-se's successors introduced marriage, government, working in metals, the use of musical instruments, and characters for the division of time. The profligacy and misrule of Te-chih is noticed, and then follows Yaon's deluge." . . . He then gives some remarks of Dr. Medhurst's, on that which the latter styles *the traditional* period of Chinese history.—"While we might be unwilling to give full credit to what Chinese writers say of the events of this period, it is not improbable that much of it is drawn from the correct account of the antediluvian period handed down by Noah to his posterity. The coincidence of the generations having passed away, the institution of marriage, the invention of music, the rebellion of a portion of the race, and the confused mixture of the divine and human families closed by the occurrence of the flood in the time of Yaon might lead

ments of Egypt, Mr. Titcomb has recognized in the people depicted under the name Khita, the Hittites, or the sons of Heth or Cheth. If my memory serves me, the name Khita is by some pronounced Sh-tā, and the people of that name are, I think, identified by Mr. Osburn, in his work on Egypt, with the people of Sheth ; and these are made out by him to be the Moabites and Ammonites. The particulars which he states respecting this people are very remarkable. They appear on the monuments as not properly Canaanites, yet in many particulars closely resembling them. Like the Canaanites they had frequent wars with Egypt. Their country was not far from the Dead Sea, and apparently between Naharaim and the Hittites. They seem to have consisted of two confederate races, and there were in their country two places or cities known by the name of Rabbah. All these and several other particulars seem to mark them, then, as the Moabites and Ammonites, the descendants of Lot. This is confirmed also by a remarkable coincidence, which involves also another striking identification. The Hyksos of Manetho have been supposed to be the same as the Shos of the monumental pictures ; and with these Shos as with the Egyptians, the Sh-tā or Sh-tim are represented as warring. Moses informs us that the Rephaim, who had the name also of Zuzim, were driven out of their possession by the children of Lot. Mr. Osburn considers that these Sh-tā are intended in Numbers xxiv. 17, where Balaam says "There shall come a star out of Jacob, and a sceptre shall rise out of Israel, and shall smite the corners of Moab and destroy all the children of Sheth." "There is a parallelism of expression here which tends to confirm this view—Jacob and Israel—Moab and the Sh-tā, or the Ammonites." I had some years ago the privilege of corresponding with Mr. Birch, of the British Museum, on this subject. To his remark, that while there was much in the many points of coincidence adduced by Mr. Osburn, it was dangerous to rest the interpretation of a passage on a name (Sheth) occurring only once in Scripture, I replied, that in its plural form (Shittim) it occurs, and in connection with Moab, several times. I could have wished that Mr. Titcomb had adduced the testimony to the Deluge which is found in the constellations. Faber, in his *Horæ Mosaicæ*, makes great use of it. He points out the various aquatic animals, and water streaming in almost every direction. We have a ship, the *Argo* : we have a dove, a raven, a serpent, and a giant. All this, indeed, the Greeks have claimed and mixed up with their fables. But the

us to conclude, that in their allusions to this period the Chinese are merely giving their version of the events that occurred from Adam to Noah." On these two quotations, Dr. Legge remarks that he can perceive in them no traces of that "rabbinical superstition," and of that subjection to "the intolerant ignorance of their churches," with which Bunsen was pleased to charge these two distinguished missionaries. But, he adds, that what is said in them about the deluge of Yaon is misleading. The reader is by it led to suppose that it occurs in Chinese history as caused by the declension and wickedness of preceding times—a judgment from Heaven. "But the *Shoo* is entirely silent on this point. Not a word is said as to the floods being a punishment of the sins of either ruler or people."

very position of the Argo proves that its attached story was not of Grecian origin. No, there is something very mysterious both in the origin and in the universality of the whole sphere. And my conviction is, that the more carefully it is studied the clearer will be its testimony to events of a universal character, both in themselves and in their influence on mankind. In this as in so many other ways, "the heavens declare the glory of God."

MR. T. HARRIOT.—I am about to furnish an illustration of the truth that "fools rush in where angels fear to tread." I have no knowledge of this particular subject, but I do not see why we should refrain from expressing the convictions excited in us by the arguments we hear used on sacred subjects, any more than we should curb the freedom with which we discuss secular matters. It appears to me that the whole gist of Mr. Titcomb's paper is based upon this assumption—"granting the truth of the Pentateuch." Now, I am not a sceptic—for forty-five of my fifty-one years have I drunk at the fountain of living waters, and the older I grow the more convinced I am of the truth and beauty of our religion. I therefore trust that no one will imagine that I am a sceptic. But what a sceptic would say is this—that the whole of Mr. Titcomb's cumulative evidence would prove the very contrary of what the author wishes to prove, namely, that the works of creation, like the Creator Himself, had been eternal; that there was nothing new under the sun; and that all things had been going on from generation to generation just as they go on now. Supposing, by way of argument, that the incidents narrated in the Pentateuch had occurred in some small commercial spot on the earth, and men going abroad had carried the legend with them—some being uneducated men who could not write, while others could,—the same spirit would manifest itself in all the various versions that would thus be promulgated, though the versions might differ very considerably. That is one impression that has been created in my mind by this paper, which does not seem to me to furnish any evidence of the truth of the Pentateuch. I must also confess to having an impression that the faith which must sustain us is not founded upon the evidence of things that have been seen. It brings us to God without evidence, and compels us to believe that He is God, and that He is the shelter of those who come to Him. It is to me a question whether any value at all is to be attached to the sort of evidence which is contained in Mr. Titcomb's paper.

THE REV. C. A. ROW.—I should not have made any remarks on this subject, for I have been too much occupied to be able to estimate this paper as a matter of evidence, but I was much surprised at the remark made by the last speaker, that we must believe without evidence. Now I enter my most emphatic protest against such an assertion, for if it were true it would make a large mass of thinking men unbelievers. With regard to what has fallen from Mr. Graham, I am afraid he will not be able to make out his position that the cross was never a pre-Christian symbol, and I am also afraid that learned men will not bear him out in some of his derivations. In fact a great number of Greek fables must be traced to Indian sources, and if it is shown that there is a similarity between them and the statements in the

Pentateuch, they must have originated from common causes acting on the mind of man. The whole question of mythology is one where it is very difficult to arrive at a correct conclusion as to its nature and origin, but such works as Coxe's "Aryan Mythology" are very valuable for dealing with it on general principles. But I am ready to admit, and do admit, that certain causes can produce a similarity of result without one flowing from another, and I will quote a conclusive proof of that. Any one who knows anything of Tartary is aware that the Bhuddist religion has produced the most singular resemblances to certain rites in the Romish Church. The Jesuits, as we well know, have actually hinted that they thought Satan had been beforehand with them, and had invented there things to oppose the introduction of Christianity. That same idea is to be found in the writings of Huc, and others, who were astonished to find practices existing in China which much resembled the rites of their Church. I am satisfied that these things are not imitations of anything in Christianity, but that they all proceed from one common source—from certain laws of the human mind thinking under a peculiar aspect. No doubt they are essentially pantheistic in character, and I have no doubt that their origin is that pantheistic notions, migrating westward, have produced great movements, spreading down to our time. We see certain distinct resemblances between the religion of Thibet and of Europe, during the mediæval ages, and they have been elaborated from similar causes, acting on the human mind. I think this is important, because it shows plainly that we must have some hesitation in judging of these things, and that it will require considerable trouble to ascertain what are the real principles on which the great mass of mythology has been constructed. We have many instances in which the resemblances are of a close nature, and yet are not copied from one to another.

Mr. HARRIOT.—But is there anything of those regular and close imitations of Roman Catholic rites in the Bhuddism of India?

Mr. ROW.—I think so; you will find the resemblance very close.

Mr. MOULE.—Yes; there are crosses, and beads, and monachism, and many other things which are close imitations of the Roman Catholics, including the repetition of prayer, and praying to a queen.

Mr. ROW.—And they even go further. There are the praying mills.

Mr. C. GODFREY.—May I make one or two observations? and first, on the subject of crosses. Crossed buns were found in Herculaneum. This is a matter that I do not know much about, but I should like to ask a question or two of a practical character. If the Turanian language was the language of man down to the confusion of tongues at Babel, it must stand to reason that all those who lived from Adam down to that time must have spoken it. But when you find all the names of people from Adam down to Noah having meanings in themselves, and self-explained, I want to know how that bears out your position? There is Adam, red man; Eve, life, or the mother of all living; and Cain, Seth, Abel, and the rest are all similarly capable of translation. Now, how did these names come to be used? We are told that woman is so called because she was taken out of

man, but in no language, except the Semitic, is the equivalent for woman the feminine of the equivalent for man. In Latin you have *mulier*, woman ; *vir*, man ; and in Greek *γυνή*, woman, and *άνήρ*, man. When you put these things together, I think you are not justified in considering the Semitic language to be a derived formation, and I think it must represent what, at one time, was the original language of the world, or else those so-called translations of the words Adam, Eve, Seth, Cain, &c., appear to me to be very little better than mere puns. Either those words must be the names of the people they are applied to, or they are translations, and I should like to have the point cleared up by any one who has studied the matter. (Cheers.)

The Rev. G. HENSLOW.—I would repeat a point which has already been referred to. This paper acts upon the assumption, throughout, that the facts of the Pentateuch are true. Now I have often heard talented men speak in this way—taking the case of the serpent, for instance :—“ We all know that evidence of serpent-worship is ubiquitous, but that is not evidence in proof of the Bible ; it is the Bible that is simply an illustration of a universal fact.” Such evidence, therefore, does not act on their minds as supporting the truth of Genesis at all. I should like to have that point fairly met.

Mr. TITCOMB.—Crosses were not always connected with Christianity. When Roman Catholic missionaries visited India, they found crosses existing all over the country.

Mr. GRAHAM.—I do not say that crosses were exclusively connected with Christianity. I say that Christianity suggested the thought of the cross in Ireland, [and the Roman Catholics in Ireland claim the crosses as theirs, and are constantly setting them up, year by year]. Crosses were derived from the Romans, by the Jews, for crucifixion was introduced among the Jews from the Romans.*

Dr. J. A. FRASER.—There are still to be found, within the recollection of some present, instances in English, Scotch, and Irish counties, which bring to mind the fire-worshipping practices, and the sacrifice of children to Moloch. Lady Baird mentions that on her own estate in Scotland it was the practice of the peasants on May Day to gather round a fire, and throw their children across from one to another through the fire. That is just a remnant of the old fire-worship still existing among us. Thornbury† mentions the same practice in very similar terms as existing in Devonshire, and Charlotte Elizabeth‡ in Ireland, where they assemble round fires which bear the name of Baal fires. Beltane is the name of the 1st of May in Scotland even now, commemorating the ancient name of Bel. The existence of

* Crucifixion was a mode of execution among the Syrians, Egyptians, Persians, Carthaginians, Greeks, and Romans, and usually accompanied by other tortures. Ariarathes of Cappadocia, when conquered by Perdiccas, was crucified with his principal officers, 322 B.C. Constantine ordered crucifixion to be discontinued, A.D. 330.—*Haydn's Dictionary of Dates*. Sometimes a narcotic was given to the sufferer.—ED.

† *Tour round England*.

‡ *Personal Recollections*.

such things bears testimony to the correctness of the description in the Bible, of the sacrifice of children to the god of fire. This is a curious illustration, which the fact of this being the 1st of May has just called to my mind. (Cheers.)

Mr. GODFREY.—We may consider Bel and Beltain to be rather Baal than Moloch.

Dr. FRASER.—I should have added Baal, as well as Bel, i. e. Moloch.

Mr. TITCOMB.—I quite agree with Mr. Gosse's view as given in the first part of his letter. It would be a very desirable thing to have the nomenclature of the philological families of the earth so constructed as to avoid the use of the words "Hamitic" and "Semitic," but when words are so commonly used, it is next to impossible to upset them and invent anything fresh. You speak of things being Semitic or Hamitic and so on, philologically, and there seems to be a feeling that they should be the same ethnologically, but that is not so ; and it is that fact which has obliged me to insert the 28th and 29th sections in my paper. Mr. Gosse was the first to raise an objection as to the derivation of Babel. I do not dispute his remarks, or Mr. Graham's, but that does not interfere with the argument on which my criticism was founded, because I was merely showing that Chaldea had Semitic nations in it, and whether we take the word as "gate of God," or as "confusion," it is still identified with the Semitic tongue. It is merely a microscopical criticism, and if it be a blemish or defect it is only a small one. As to the Runic Crosses, I can only say that all Mr. Newton's arguments, which would otherwise invalidate a portion of my paper, must rest on the assumption he took that the Runic Crosses are so ancient as to date from a period prior to Christianity. We know the cross is seen before Christianity, because Christ was crucified on a cross, and those Runic Crosses may have been coincident with a very remote time. But when you come to the ornamentation you cannot decide, and the degree of elaboration on these crosses seems to be inconsistent with primitive times. It is possible that an old cross might have had a crucifixion engraved on it at a subsequent period, and so these Runic Crosses may have had crucifixions engraved on them subsequently, as in the case of the Egyptian monuments. Mr. Newton might say that persons connected with the Jewish religion might have had access to the Egyptian monuments, and engraved subjects upon them which seemed to indicate a knowledge of the Pentateuch.

Mr. NEWTON.—That is not my argument. My argument was this : that if the Runic Crosses exist now as they were originally made, and if they were made anterior to Christianity, they would tell by the figures upon them against your argument, because they represent certain scenes in the New Testament.

Mr. TITCOMB.—But you could not expect that any power of production could have represented a crucifixion with a sponge and spear at a period anterior to Christianity ?

Mr. NEWTON.—The interpretation of a picture may be changed according to the view of the interpreter.

Mr. TITCOMB.—But a crucifixion with a sponge and spear is unique. Then with regard to what fell from Mr. Moule as to taking with caution the assertions of the Jesuits ; that no doubt, is very important, but I would call to his attention that Gutschaff, the great Chinese missionary, and others, quote them, and say with reference to one of the earliest Chinese books, in existence before the Jesuits came, and dealing with a period long anterior to Christianity, that it contains the history of Fo-hi and the Deluge, showing that Fo-hi came from western parts with seven companions—his wife, three sons, and three daughters. That thoroughly gets rid of the idea that there has been any manufacturing in the matter. Similar things are to be found throughout the world, and yet we are told that they arise from the constitution of the human mind, and that no just argument as to a common origin is to be drawn from them. No doubt that is logical and true to a certain extent, but yet it must be taken within certain limits.

Mr. ROW.—Oh, of course.

Mr. TITCOMB.—For instance, I have not taken the general idea of serpent-worship. It appears to me that naturally the serpent would have been taken as an embodiment of evil to be worshipped from dread, but I believe that the evidence which I have drawn from serpent-worship is not based upon that natural disposition of the human mind, but upon the concurrence of artificial and otherwise not natural ideas which appear and reappear here, there, and everywhere, and which I think indicate, from their general concurrence, a common origin. You find a serpent, a tree, fruit, a man and woman, and the serpent in an erect position. Will you tell me that it is a natural development of the human mind to make these representations in consequence of the general idea of serpent-worship from dread ? I can imagine that such things may have nothing to do with Scripture, but when you come to the artificial combination of these various parts, the whole question is different. If we are candid, and reason without prejudgment for or against, it is *a priori* reasonable to suppose that there must have been a common origin. The general fact that all nations have a deluge would not prove the deluge of Noah ; but when you come to a multitude of these cases grouped together—the deluge of Chaldea, the deluge related by Lucian, the deluge of Coxcoc, and the deluge of Satyaurata—from different parts of the world and in different ages—not a bare deluge, but one in which people are preserved, and in which you have the division of two and two animals ; and a deluge caused, too, by the moral degeneracy of mankind, subsequent to which there is a dispersion of the new race over the world—all these things present peculiarities and specialties so diverse from the uninformed conception of the human mind, that I think they indicate a common origin. It is like the putting together of different bones on the principles of comparative anatomy and declaring that they all belonged to one animal. But this does not touch what Mr. Henslow has said. He says the sceptic might say “ You have collected together an accumulation of facts all of which are agreeable to each other, but how can you prove that the Scripture is not part and parcel of the same congeries of events, and has not taken up the same tale ? ” But every-

thing must have a beginning, and if these stories are not likely to have been invented out of the imaginative faculty independently exercised in different ages, and amongst different nations, there must at least have been a beginning in their origin. Mr. Harriot seemed to indicate that some commercial nation may have carried these stories abroad. Whether that is so or not does not much matter. Supposing that these things are found, we want, by scientific discovery and scholastic research, to know their origin—what has caused that general combination with its divergencies, but yet with such extremely particular agreements?

Mr. HENSLOW.—If it is an open question, is there any possibility of satisfying the sceptic upon the point?

Mr. TITCOMB.—Well, I am not giving this as intended for the sceptic. My paper assumes the Scriptures to be correct, and does not attempt to prove that they are correct, and in that I think its basis is logical. This Society is intended to pursue science fairly and openly, but reverently. It is not for the purpose of proving the Scriptures to be true, but of so searching into science as not to be afraid to compare its results with the Scriptures. That is the only scientific basis on which we can hold our place. I take it that my paper does keep to that ground. It makes no attempt to bolster up the Scriptures, but, addressing Christian men and women, it says that everything goes to show, so far as we can gather from ethnological testimony, that what we believe is really confirmed and borne witness to by all that the paper contains, and I maintain that upon that basis, which is a logical and scientific basis, the paper has proved everything which it undertook to prove. I had no idea in writing the paper that it contained all the materials necessary to convince the sceptic. We do not wish to prove the Bible true, but, believing it to be true, we are not afraid of searching into scientific facts, and, with all the aid that research can give us, of comparing the results with the facts of revelation and the foundations of our belief. If that is the only result of this discussion, it does do what is most important. The words with which I closed my paper, I again repeat:—"Assuming, then, as I hinted at first, that the Pentateuch is both authentic and genuine,—facts which I trust none of you dispute,—we have in this line of argument an ethnic testimony to its accuracy which cannot but confirm and consolidate our faith, and which, at a time like the present, when the Pentateuch is assailed both by critical and scientific scepticism, must be very consolatory to timid and doubting hearts." We have found facts which do confirm and which do not invalidate those truths that are so dear to all our hearts. (Cheers.)

The CHAIRMAN.—I have not many remarks to offer on the subject which has been before us, except to say how heartily I concur in many of the observations that have been made, and how thankful we ought to be that these matters are discussed with temper and propriety, and with a sincere desire to arrive at the truth. My idea of the Society is that it should take care that facts are facts, and not mere discoveries for the moment to be used as a sort of battery against revealed religion. Our great object is "fact, fact, fact," and I should like to examine those produced by some at the British Associ-

ation, and let them examine ours in the same way, and then we should arrive at the truth as to whether they are facts or not. Revelation has no more to fear from science and fact than the moon has to fear from my throwing a stone at it. All I want and ask for is "fact," and the only complaint I have to make is that many people, eager to assail revelation, seize hold of something that is held to be a fact directly it is discovered, and direct it like an Armstrong gun against Revelation, until it is found to be no better than a pop-gun. But what does it do? It shakes the faith of many people who never see the refutation and never know better. I was reading a paper the other day by a French author, M. Pouchaud, who makes this statement, "that since 1806 eighty-six distinct theories, all hostile to revelation, have been constructed upon geology, but that in 1863, when his paper was written, not one of them remained." Yet probably each of those théories made several infidels, who fell into doubt and difficulty from which they never recovered, through not hearing the refutation. Our great object, I repeat, is "fact." I would examine the most telling facts against the revealed word of God with the utmost minuteness and fairness, and take great care not to throw crude theories to the world, before we ascertained whether there is a foundation for them or not. I cannot agree with what fell from my admirable friend Mr. Row, who says that these things are human developments of similar thoughts in different parts of the world. It is true that there are developments of opinion in the mind; but I never heard of similar developments of facts through which a simultaneous belief arose all of a sudden, and in all parts of the world, that there was a deluge, that eight persons were saved from it, and that such and such other things occurred, all going into minute details. Such things, I say, appear to have the character of truth.

Mr. Row.—Take the monasteries that exist on the largest scale in Thibet, and other things that show a similarity to the observances of the Romish Church. Those are matters which I referred to.

The CHAIRMAN.—But I do not altogether rely on Huc. I think we must see that all this concurrent testimony from so many parts of the world, all bearing on those points contained in the first eleven chapters of Genesis, make us believe that they proceeded from a common origin, and could not have been the simultaneous and independent growth of many different nations at different periods.

The Meeting was then adjourned.

INTERMEDIATE MEETING, MAY 15, 1871.

THE REV. J. H. TITCOMB, M.A., IN THE CHAIR.

The Minutes of the last Meeting were read and confirmed, and the following Election announced :—

MEMBER.—The Rev. James Hill, D.D., Greenwich Hospital.

The Rev. C. GRAHAM then read a paper on "Miracles." A Discussion ensued in which the Chairman, Mr. T. Harriot, Mr. Krishnarao Gopal Deshmukh, Mr. Conway, Captain F. Petrie, Mr. C. Dibdin, the Rev. C. A. Row, and the Rev. Sir W. Tilson-Marsh, Bart., joined.

The Rev. C. GRAHAM having replied, the Meeting was adjourned.

ANNUAL GENERAL MEETING, held at the House of the
SOCIETY OF ARTS, MONDAY, MAY 22, 1871.

THE RIGHT HON. THE EARL OF SHAFTESBURY, K.G., PRESIDENT,
IN THE CHAIR.

The CHAIRMAN.—The proceedings will commence by the Honorary Secretary reading the Annual Report.

Captain F. PETRIE then read as follows :—

*FIFTH ANNUAL REPORT of the Council of the VICTORIA
INSTITUTE, OR PHILOSOPHICAL SOCIETY OF GREAT BRITAIN.*

Progress of the Society.

1. In presenting a Fifth Annual Report, the Council of the VICTORIA INSTITUTE desires to express its belief that the proceedings of the Session now terminating have considerably advanced the objects of the Society ; and it is with great satisfaction that it does not find itself called upon, as in former years, to record a falling off in the number of members ; but on the contrary, to announce that the Institute has received a very considerable accession of strength in the new members that have joined.

2. The late Secrètary retired on the 1st of February, having been unable to devote that time to the duties of the office which its importance required, after which Captain F. W. H. Petrie and Mr. Reddie were associated as Honorary Secretaries, until the death of the latter. The former now

carries on the duties with the aid of a paid clerk; and the Council has accepted the kind offer of Mr. F. K. Shrapnell's services as a temporary Honorary Secretary in case they should be required.

3. With a view to the convenience of Members and Associates, the Reading and Writing-room, and Library, have been thrown open from ten to six o'clock, and if Members and Associates will let their friends know of this additional advantage to Subscribers which the Institute can now offer, and thus induce new members to join, it will be one of the most certain and best means of advancing the interests of the Society, and of enabling the Council to carry out its objects more fully. Although, of late, many valuable additions have been made to the Library, yet it is by no means as large as is desirable, and the Council will gladly welcome gifts of books, as well as further subscriptions for it, and, whenever the funds will warrant the outlay, new periodicals and books of reference will be obtained.— The position of the Institute, being in the immediate vicinity of Charing Cross, is very convenient both for town and country members.

4. The Council has had each year the painful duty of chronicling the loss by death of Members and Associates. This year the task is of a more than usually mournful character, for it has to announce the death of the honorary secretary, the late James Reddie; and it cannot do so without recording its deep sense of the loss which the Institute has thereby sustained, and at the same time expressing the great honour with which it feels sure his name will ever be associated in its annals, not only as the founder of the Institute, but as one who, uniting many literary and scientific attainments with untiring energy and zeal, proved eminently successful in contributing to the popularity and prosperity of this Society, the "objects of which are among the loftiest which the student of philosophy and science can put before him." It regrets also to have to announce the decease of the following:— Rev. J. H. Ballard, M.A., Second-class Associate; W. H. Elliott, Esq., Life Member; Samuel Petrie, Esq., C.B., Member.

5. The following is a statement of the changes which have occurred during the past year:—

| | Life Membs. and Associates. | Membs. (Annual.) | Associates. 1st class. 2nd class. | |
|--|--------------------------------|---------------------|--------------------------------------|----|
| Numbers on 1st May, 1870 | 21 | 194 | 13 | 46 |
| Deduct deaths ... | 1 | 2 | | 1 |
| | — | — | — | — |
| | 20 | 192 | 13 | 45 |
| Changes | 1 | 4 | | 3 |
| | — | — | — | — |
| | 21 | 188 | 13 | 48 |
| Struck off and withdrawn..... | | 32 | | 4 |
| | — | — | — | — |
| | 21 | 156 | 13 | 44 |
| Joined between May 1st, 1870, and May 1st, 1871 | 4 | 22 | 3 | 22 |
| | — | — | — | — |
| | 25 | 178 | 16 | 66 |
| | | 260 | | |
| | | 25 | | |
| | | — | | |
| Total..... | | 285 | | |
| | | — | | |

Finance.

6. The Audited Balance Sheet of the Treasurer for the year ending 31st December, 1870, is appended, showing a balance in hand of £31. 11s. 5d. It will be observed that this Balance Sheet has been divided into two parts, one headed "General Account," and the other "Special Fund for Library, &c." The first exhibits a balance in hand of £14. 14s. 11d.; the second, a balance in hand of £16. 16s. 6d. The total amount now invested in the New Three per Cent. Consols is £359. 2s. 2d.

7. The arrears of subscription are now as follows :—

| | 1866. | 1867. | 1869. | 1870. |
|---------------------------|-------|-------|-------|-------|
| Members | 3 | 2 | 6 | 5 |
| 1st Class Associates..... | 0 | 0 | 0 | 0 |
| 2nd „ „ ... | 0 | 0 | 1 | 1 |
| | — | — | — | — |
| | 3 | 2 | 7 | 6 |

The Council has refrained from striking off the names

representing these arrears, as some have been distinctly promised to be paid, and some are believed to be left unpaid on account of those by whom they are due being abroad: to all, the Journals have been regularly sent, for periods for which subscriptions are due, without being returned; and the Council trusts it will be saved the painful duty of reporting any of these names as defaulters, to be struck off the rolls of the Victoria Institute. It proposes, however, that it shall be considered its duty, at discretion, to strike off the names of Members or Associates who are more than two years in arrear, and to publish such names in future Annual Reports when this course is deemed advisable.

8. The estimated ordinary assets of the Society for the current year, exclusive of arrears and of new subscribers, are as follows:—

| | |
|--|---------|
| 178 Members, at £2. 2s. | £373 16 |
| 16 1st Class Associates, at £2. 2s.... | 33 12 |
| 66 2nd „ „ at £8. 1s.... | 69 6 |
| <hr/> | |
| 260 Annual Subscribers. | |
| 25 Vice-Patrons, Life Members, and Life Associates. | |
| (Dividend on £359. 2s. 2d. Three per Cent. Stock) | 10 11 |
| 285 Total | <hr/> |
| | £487 5 |
| | <hr/> |

Meetings.

9. The following is a list of the papers for the present session, viz. :—

- On Dr. Newman's "Essay in Aid of a Grammar of Assent." By the Rev. C. A. Row, M.A. (Jan. 16th, 1871.)
- On Archæology, with some of its Parallels and Contrasts. Illustrated with Diagrams. By the Rev. J. H. TITCOMB, M.A. (Intermediate Meeting, Jan. 30th.)
- On the Evidence of the Egyptian Monuments to the Sojourn of Israel in Egypt. By the Rev. B. W. SAVILE, M.A. (Feb. 6th.)
- On Phyllotaxis, or the Arrangement of Leaves in accordance with Mathematical Laws. Illustrated with Diagrams. By the Rev. G. HENSLOW, M.A. (Intermediate Meeting, Feb. 20th.)
- On Biblical Pneumatology and Psychology. By the Rev. W. W. ENGLISH, M.A. (March 6th.)
- On some Curiosities of Ethnology. By the Rev. J. H. TITCOMB, M.A. (Intermediate Meeting, March 20th.)

On some Scriptural Aspects of Man's Tripartite Nature. By the Rev. C. GRAHAM. (April 10th.)

On Evidences of Design in the Constitution of Nature. By E. HAUGHTON, Esq., M.D. (Intermediate Meeting, April 17th.)

On Ethnic Testimonies to the Pentateuch. By the Rev. J. H. TITCOMB, M.A. (May 1st.)

On Miracles. By the Rev. C. GRAHAM. (Intermediate Meeting, May 15th.)

The Annual Address. By the Rev. W. J. IRONS, D.D. (May 22nd.)

On the High Numbers in the Pentateuch. By P. H. GOSSE, Esq., F.R.S. (June 5th.)

Israel in Egypt. By the Rev. H. MOULE, M.A. (June 5th.)

10. Although the regular "ordinary" meetings during the present session have been only monthly, yet others have taken place, at which—in accordance with the fifth object of the Institute—subjects not necessarily requiring permanent record in the *Journal of Transactions*, were taken up in Papers or Lectures, followed by discussions. The advantage in reducing the number of "ordinary" meetings and papers this session is that henceforth the issue of the printed transactions will be more prompt.

11. The meetings of this session have been very well attended.

Publications.

12. Part 18 of the *Journal of Transactions* is now in the course of being printed, and will be issued next month. Nos. 19 and 20 will also be published before next session commences, completing the fifth volume of our *Journal of Transactions*, and the publication of all our Papers and Discussions up to the commencement of the present session.

Conclusion.

13. The several objects of the Institute are now being realized, and the Council expresses an earnest hope that this will give a fresh impulse to the prosperity of the Society, and lead to a large accession of new members. With comparatively small means much valuable work has been accomplished, but the numbers of the Society should be doubled, before the Council can cease to have anxieties as to the expenditure arising from the publication of a large volume of *Transactions* every year. Several influential persons interested in the maintenance of revealed truth, and who have freely acknowledged how much the Institute has already done, are now

beginning to join our ranks, thereby testifying to the value of the investigations of a Society which desires impartially to consider the mutual bearings of scientific conclusions, with a view to advancing true science. The Council feels that it is its duty to remind all, that the avowed enemies of Christianity know well how to concentrate their forces and to support one another by combination. As this Society can point to steady, systematic, and permanent work in opposing the false philosophy, pseudo-science, and rampant scepticism of the present time, all who feel that this has to be done, should become fellow-workers, that our field of usefulness may be still more extended, and the labours of the VICTORIA INSTITUTE be still more successful.

Signed on behalf of the Council,

SHAFTESBURY, *President.*

W. N. WEST, Esq., the Honorary Treasurer, then read the Annual Balance Sheet, as follows :—

FIFTH ANNUAL BALANCE SHEET, from 1st January to 31st December, 1870.

[illegible]

SPECIAL FUND FOR LIBRARY, &c.

| | £. | s. | d. |
|---|-----|------|-------|
| Donations received in 1870, as per List | ... | 171 | 19 0 |
| | ... | 155 | 2 6 |
| Furniture, Repairs, &c. | ... | 16 | 16 .6 |
| Balance at Bankers' | ... | ... | ... |
| | | £171 | 19 0 |

We have examined this account with the books and vouchers, and found it correct.

F. PETRIE Auditor.
W. N. WEST, Treasurer

DONATIONS TO THE SPECIAL FUND.

Paid prior to 31st December, 1869.

| | £. | s. | d. |
|--------------------------------|-------------|-----------|----------|
| S. MORLEY, Esq., M.P. | 100 | 0 | 0 |
| I. BRAITHWAITE, Esq. | 25 | 0 | 0 |
| R. MULLINGS, Esq. | 10 | 0 | 0 |
| Dr. J. H. WHEATLEY | 10 | 0 | 0 |
| H. W. BLEBY, Esq., B.A. | 5 | 0 | 0 |
| T. PROTHERO, Esq. | 3 | 3 | 0 |
| A. J. WOODHOUSE, Esq. | 3 | 3 | 0 |
| W. N. WEST, Esq. | 2 | 2 | 0 |
| G. WILLIAMS, Esq. | 1 | 1 | 0 |
| Rev. J. H. Rigg, D.D. | 1 | 1 | 0 |
| | <u>£160</u> | <u>10</u> | <u>0</u> |

Paid during 1870.

| | £. | s. | d. |
|--|-------------|-----------|----------|
| ROBERT BAXTER, Esq. | 52 | 10 | 0 |
| W. MCARTHUR, Esq., M.P. | 21 | 0 | 0 |
| JOHN NAPIER, Esq., <i>Glasgow</i> | 10 | 0 | 0 |
| W. VANNER, Esq. | 10 | 0 | 0 |
| Vice-Admiral HALSTED | 5 | 0 | 0 |
| S. PETRIE, Esq., C.B. (the late) | 5 | 0 | 0 |
| Rev. J. H. A. WALSH, M.A. (the late) | 5 | 0 | 0 |
| Rev. W. NIVEN, B.D. | 5 | 0 | 0 |
| Rev. W. H. BATHURST, M.A. | 2 | 2 | 0 |
| Captain JASPER SELWYN, R.N., <i>Tring</i> | 3 | 0 | 0 |
| J. A. FRASER, Esq., M.D., I.G.H. | 5 | 0 | 0 |
| T. W. MASTERMAN, Esq., <i>Reading</i> | 5 | 5 | 0 |
| W. H. INCE, Esq. | 2 | 2 | 0 |
| Rev. Prebendary C. KEMBLE, M.A. | 5 | 0 | 0 |
| A. V. NEWTON, Esq. | 3 | 0 | 0 |
| Rev. J. B. OWEN, M.A. (the late) | 3 | 0 | 0 |
| CHARLES BROOKE, Esq., F.R.S. | 5 | 0 | 0 |
| Rev. A. DE LA MARE, M.A. | 3 | 3 | 0 |
| JOHN SHIELDS, Esq., <i>Durham</i> | 2 | 2 | 0 |
| S. D. WADDY, Esq. | 5 | 5 | 0 |
| E. CHANCE, Esq., J.P., <i>Malvern</i> | 2 | 2 | 0 |
| Very Rev. Dean PAYNE SMITH, D.D. | 1 | 1 | 0 |
| J. LEWIS, Esq., R.N., <i>Southampton</i> | 1 | 1 | 0 |
| Rev. C. A. ROW, M.A. | 1 | 1 | 0 |
| Rev. J. H. TITCOMB, M.A. | 1 | 1 | 0 |
| G. C. HARRISON, Esq. | 1 | 0 | 0 |
| Rev. C. SKRINE, M.A. | 1 | 0 | 0 |
| J. SHAW, Esq., M.D., <i>Boston</i> | 1 | 0 | 0 |
| W. PAYNE, Esq. | 1 | 0 | 0 |
| Rev. Dr. THORNTON, D.D. | 3 | 3 | 0 |
| Rev. G. R. BADENOCH | 1 | 1 | 0 |
| | <u>£171</u> | <u>19</u> | <u>0</u> |

ADDITIONAL.

| | £. | s. | d. |
|-------------------------------------|------|----|----|
| A. MCARTHUR, Esq. (promised) | 42 | 0 | 0 |
| Total | £374 | 9 | 0 |

Rev. J. ROBBINS, D.D.—My Lord, ladies and gentlemen: The resolution intrusted to me is as follows: “That the Report of the Council be received, adopted, and circulated among the members and associates.” Of the necessity for the existence of such an Institution as this it is needless to speak, for that has been sufficiently set out by the paper of objects, as well as in the Report itself. That that opinion is held by many others of more widely extended influence than I possess is proved by the number—small, indeed, but yet the number—of distinguished persons whom I see present. Those persons, I believe, are not all of them members of the Institute, but their presence here proves that the necessity for such a Society is felt by others. It is only to be hoped that the various papers which the Institute puts forward will do a vast amount of good, and that we shall soon see a larger number of members joining us, so as to relieve the Council from all anxiety upon questions of finance. It was my misfortune only to become acquainted with your late honorary secretary, Mr. Reddie, a few days before it pleased God to take him away from this world, and his death was a bitter disappointment to me, for I had formed such a high opinion of him, and expected to derive such an advantage from his society, that the blow I felt was a very severe one. I can easily judge what grief will be felt by the older members of the Society, of which he was the founder, and who were better acquainted with him than I had the opportunity of being. I beg to move that the report which has been read be received and adopted. (Cheers.)

Mr. W. DAY.—My Lord, ladies, and gentlemen: I beg to second this resolution, and wish to suggest that the proof copies of those papers which are read at our meetings should be sent beforehand to such of the members as may desire to have them, in order that those able to be present may be better prepared for the discussions, and those who can not, may have an opportunity of expressing their views in writing.*

The resolution was carried unanimously.

Rev. J. HILL, D.D.—I beg to move the following resolution:—“That the thanks of the members and associates be presented to the Council and honorary officers for their efficient conduct of the business of the VICTORIA INSTITUTE during the past year.” I am satisfied that all the officers of the Institute have done their utmost, and deserve well of those who are friendly to the cause for which the Institute was established. I feel that such an Institute is required, and trust that all who are able to support the objects which it has in view will do so.

Major COOPER GARDINER.—As one of the oldest associates of this Institute, I can say with confidence that I fully agree with the resolution, and beg to second it.

The resolution was agreed to.

* By an arrangement made this year (1872), members giving in their names for the purpose, may obtain such papers a week before they are read.—ED.

Rev. G. HENSLow.—My lord, ladies and gentlemen : The duty has devolved on me, in connection with Captain Petrie, of thanking the members and associates of this Institute for the kind way in which they have expressed their appreciation of the services of the Council. It is out of place for a member of the Council to speak of his own doings in terms of praise, but let me concentrate all the praise in one quarter where all will be glad to see it placed, and pay a tribute to Mr. Reddie, whom we have lost. (Cheers.) During the greater part of last year he was generally, if not always, present at the Council meetings, and we owed much to his assistance and advice. We can only thank him in memory, but there is one other person to whom I would specially allude, and that is our present honorary secretary, who is too modest to speak of his own services ; but the Council and all the members who have known those services will, I am sure, join in thanking him specially. (Cheers.) Since our paid secretary retired, we have had a large influx of members, as you have seen ; and the energetic way in which Captain Petrie has acted, and acted so successfully, has struck us all as something marvellous. In carrying out the work that fell not only to the late Mr. Reddie, but also to the retired secretary, there has been no want of zeal or energy on his part, and I think he is specially entitled to receive the thanks of the members and associates of the Institute. (Cheers.)

Captain F. PETRIE.—My Lord, ladies and gentlemen : On the part of the honorary officers I beg to thank you for the kind expression of your approval, which I am sure is very gratifying to us all. (Cheers.)

R. W. DIBDEN, Esq.—I am sure we all endorse what has fallen from Mr. Henslow. I beg to move that the following gentlemen be the Council and Officers of the Institute for the ensuing year :—

COUNCIL AND OFFICERS FOR 1871-72.

President.

The Right Honourable the Earl of Shaftesbury, K.G.

Vice-Presidents.

Philip Henry Gosse, Esq., F.R.S.

Rev. Walter Mitchell, M.A.

Charles Brooke, Esq., M.A., F.R.S., F.R.C.S., &c.

Rev. Robinson Thornton, D.D.

Honorary Foreign Correspondent.

Constantin de Tischendorf, D.C.L., LL.D., &c.

Honorary Treasurer.

William Nowell West, Esq.

Honorary Secretary.

Captain F. W. H. Petrie, F.G.S., F.R.S.L., &c.

Honorary Foreign Secretary.

Edward J. Morshead, Esq., H.M.C.S.

Council.

| | |
|---|-------------------------------------|
| Robert Baxter, Esq. (<i>Trustee</i>). | William Vanner, Esq., F.R.M.S. |
| Rev. A. De la Mare, M.A. | Alfred J. Woodhouse, Esq., F.R.M.S. |
| Rear-Admiral E. G. Fishbourne, C.B. | Rev. J. H. Rigg, D.D. |
| R. N. Fowler, Esq., M.P. (<i>Trustee</i>). | *Rev. C. A. Row, M.A. |
| W. H. Ince, Esq., F.L.S., F.R.M.S. | *Rev. J. H. Titcomb, M.A. |
| Alexander M'Arthur, Esq., F.R.G.S., F.A.S.L. | Rev. M. Davison. |
| Alfred V. Newton, Esq., F.A.S.L. | H. W. Bleby, Esq., B.A. |
| William M. Ord, Esq., M.B. | J. A. Fraser, Esq., M.D., I.G.H. |
| Rev. J. B. Owen, M.A. | Rev. G. Henslow, M.A., F.L.S. |
| S. D. Waddy, Esq., B.A., Barrister- at-Law. | *Rev. Charles Graham. |
| | N. Learoyd, Esq. |
| | T. W. Masterman, Esq. |

* Editorial Committee of Reference.

I am sure we all place great confidence in these gentlemen, remembering how successfully they have carried on the operations of the Society during the past year. (Cheers.)

Rev. G. W. WELDON.—I have much pleasure in seconding the resolution.

The resolution was carried, *nem. con.*

The Rev. Prebendary W. J. IRONS, D.D., then delivered the following Address :—

ANNUAL ADDRESS.

MY LORDS AND GENTLEMEN,

THE first thought on this occasion is, I doubt not, the same in your mind as in mine. We have sustained a great loss. I feel that the Council has asked me to stand here to-day to discharge a twofold duty—address you as a Philosophical Society, and refer also to that loss. The duty is not an easy one, though in attempting it I am secure beforehand of all your sympathies.

Our friend JAMES REDDIE has been suddenly taken from us. To him more than to any other man this Institute owes its existence. To his profound faith in God and His Son Jesus Christ,—I must not shrink from saying—every one may attribute our combined action here in defence of the foundations of Christianity against assaults from without, especially some which assume a disguise of science. I well remember how, with that clearness and originality which distinguished him, he urged to me in private, long before he pressed it on the public, the need there would certainly be of a philosophical union among all “who name the Name of Christ,” our common Lord, to confront the devastating literature which, in new and various forms, ultimately denies that Name.

Not that he had any fears concerning the faith itself: but he observed that there was a growing assurance of superficial opinion, in itself very perilous; while the hasty assertions of incipient science, even when contradictory and transient, shook, and at times destroyed, the faith of the thousands who are led by the few. He pointed out, that the reputation of being “scientific,”—though in the highest rank very hardly won,—is attained with curious facility by numerous coteries, who with little knowledge and no true investigation reflect the latest crudity of the hour. Unthinking, admiring, and willing crowds, whose consciences are sometimes eager for liberation, find flattering relief in the persuasion that credulity as to matters of science indicates a philosophical temper. Then the mischievous vanity of some must, he thought, be already sufficiently irksome to men of real knowledge; while not a few make themselves specially offensive to religious minds. The resolve came thus to be steadfastly formed by

our friend, that alleged science, in its ambitious or theoretical state, should be reduced to modesty by being openly brought face to face with fact and reason; while at the same time the advances of true knowledge should be satisfactorily recorded.

Such was the work to which he resolutely set himself. For this, henceforth, he gave up time, health, and much of worldly prosperity, nobly fulfilling in his early death the chosen motto of his life—" *Ad maiorem Dei gloriam.*"

How special his qualifications were for the inauguration of a work like this, though all associated with him were conscious of them, none perhaps could testify more distinctly than myself, contemplating the movement, as I long did, without otherwise sharing in it than as a member of the Institute from the first. For I had known our friend at least half his life; and I can surely say,—nor ought I to withhold it here, though elsewhere the press has rightly honoured him as a public servant of high mark—but I feel bound to say, that so much fearlessness in truth, so much scorn of artifice, and inborn abhorrence of wrong, so much purity, rectitude, and confidence in God, I have rarely known, as in JAMES REDDIE.

His intellectual capacity, we all know, was unusual;—much vigorous thinking in his *Fresh Springs of Truth* will remain to attest it, even for those who, with the freedom usual here, may question some of his views; and his industrial energy and integrity were of that kind which the world is apt to account for by the term "genius": while the explanation to those who knew him was that he was supremely conscientious in every work that he undertook. His character had in it that impatience of all treachery to right which reminded one of certain severe tones in the Psalms of the Hebrews—his favourite book of devotions—(words there uttered as by an ideal denouncer of wrong, leading the chorus in life's solemn drama). But this only partly describes him; nor may I now add what might seem unfit for the occasion, that which I myself know of the unselfishness of his friendship, its gentleness and warmth, manly yet unobtrusive, in any time of need.

There is much to sadden and subdue in the loss of such a man; and yet he had not failed to reach the object of his life. For myself, I feel like some soldier in a wide battle-field gazing on the face of a younger comrade struck down by my side in the midst of a well-sustained effort. And as I gaze I have a cheerful look imprinted on my heart, and words seem to reach me, as from the Voice that shall award the future crowns to the moral conquerors,—"*Faithful unto death!*"

It is now our duty to estimate our present position as an Review of our position. Institute, and the work which is more immediately before us. The problems which vitally interest men are always the same; but they are presented from time to time in various aspects.

I. Five or six years ago (when we began) some alleged "difficulties," wearing an air of urgent importance, and claiming to be scientific, were importunately besetting the supposed position of Christianity. Much more was hinted, The progress of the Institute hitherto. indeed, than openly said, but the "difficulties," such as they were, had very free discussion at once among us; and in what spirit, and with what results, the *Journal of our Transactions* will show. Every one, we trust, will recognize the resolute fairness of the Council on all occasions, in the breadth and variety of opinion expressed, which they refused to restrain.

Regarding as primary the fact of our Responsibility for thought and action, a large space was conceded to the fundamental inquiries respecting it, and, it is hoped, not without fruit.—Questions of Ontology have not yet occupied us, though they must be forced on attention sooner or later. The "difficulties" of so-called science claimed practical precedence.

Some "theories of the world" were then discussed, which appeared formidable to many persons, but they are now becoming more than "nebulous," while others seem to be already as literary fossils. The omission, for instance, in Genesis of a particular cosmogony which was still in high favour as recently as 1860, may not bring down on Moses, in 1871, the supercilious title of a mere "Hebrew Descartes." Things have moved on, and other theories are in process of formation. Naturalists, too, in their department, have certainly advanced. Some who had thought Cuvier sufficiently sound, or who at most were content to trace the animal pedigree of man to the "old-world monkey," have now a yearning to the jelly-fish as our probable ancestor, and even hint, to those who have at least moral doubts, that they may go farther and fare worse.

Many other changes are indeed thought to be Our immediate future. imminent in the progress of opinion, of which it may suffice to say that we must here be prepared as Christians to deal with them as they arise. Whenever we are brought to the knowledge of fresh facts, we shall prize them; but we shall have to look closely after what may be termed

theories on their probation, for theories are apt to travel so fast that ordinary logic has difficulty in overtaking them. Mr. Herbert Spencer has an essay exposing "illogical Geology"; but there are other wanderings from right reason, in the pursuit of which we should be glad of the powerful assistance, if we might have it, of so acute a writer.

We must not complain of the position; for there is much reality in the work of our day, amidst its many insincerities. Earlier generations had their religious and intellectual trials; and let us not be sure that those same trials may not re-appear, nor yet doubt that, if the spirit of Celsus and Porphyry revive, some Origen and Methodius will be ready in the defence of truth. Meanwhile, our own duty is marked out for us; and our one thought must be to do it.

II. The subject which occupies us is, as we have said, really the same always. Whatever may detain men's thoughts as they move on, they always return to ^{Our subject} ~~is~~ ^{is ever the} ~~same.~~ inquire as to the Origin of the World and of Man.

They may even resolve, like Comte, to have nothing to do with metaphysics and scoff at theology; but they come back to us. Scientific or unscientific—though Comte is not ranked among the former by Professor Huxley, nor wholly consigned to the latter by us,—all find unfailing interest in musing at length on our Beginning and our End. It is this ever-engrossing subject which gives all its importance to our Institute. But we do not approach it with the blank uncertainty which is unprovided with principles, or unready to affirm them. That distraction is not ours expressed in the earnest lines, descriptive of too many,—

"What is our life?—a sense
Of want and weariness:
We are, and yet we know not whence;
We stay not, we are hurrying hence;
And whither?—who can guess?"

No, that is not the outset of the Christian philosophy; and we shall try to be explicit in explaining what it is.

We are precluded in this Institute, and very properly, from Theological disquisition or Religious conference strictly so called; though it is possible that a department of a special kind, limited to the criticism of fact, and some inquiries of scholarship, may become a necessity. But, without venturing on debatable grounds, we must aim at some exactness of treatment. Men of science and theologians must alike remember that if the relations of two subjects are to be compared, we must have a fair view of both. Without this there

will be mere bickering, not reasoning—a carping at details, but no apprehension of principles, no grasp of conclusions. There is a sort of wrangling which, being nearly aimless, is tiring, and becomes between opponents a poor sort of persecution, rivalling that in the stock story of Galileo and the pope, in which—though the pope has been unjustly treated—it is hard to say which side has been most unfair to the other; while the story is likely to remain for the use of speakers and lecturers of narrow historical resources.

III. We must indeed state our principles, if it were only to decline the statement or supposition of them by others. For it is obvious that many a flourish against Christianity is occasioned by an entire mistake of the ground we hold. Details, for instance, of some theological exposition are threatened at times, and then it is imagined that our religion is at stake. Let it be distinctly understood what it is we have to defend, and much trouble will be saved, as well as much irregular zeal. That which is distinctive of our position cannot, of course, be any subordinate doctrine or investigation; clearly it must be the principle which we hold as to the Origin of Being and Life. We cannot be too plain in asserting this, and marking openly the ground which we mean to defend as logically certain; and, therefore, to use a phrase of our day, “thinkable.” We by no means decline the defence of what seem to be legitimate inferences from our principle, though we cannot regard them as equally certain with the principle itself; but, as to all expositions (beyond those deductions which are necessary), we have a right to claim the largest individual liberty.

And liberty vindicated. And let no one suppose that we are “driven” into this position by the encroachments of antagonists. On the contrary, that which we are prepared to maintain on principle as the “Christian Philosophy” is all that we ought on any account to desire, whatever might be the wishes of enthusiasts on either side. If first principles are few, their consequences are not the less far-reaching. Nor do we, in marking these limits, vindicate for further exegesis any other kind of liberty than is conceded necessarily in the field of science. And before we advance a step further we must make good this claim—we say not to “private judgment,” for that would be unsuitable in subjects where none could long afford to stand alone—but to an intellectual and religious freedom, bound to no *à priori* details.

IV. That such freedom belongs to the very life, for instance, of all science, cannot need a moment’s proof; yet one or two illustrations may clear our meaning.

There is confessedly a need at present of a popular and accurate explanation of the theory and laws of Gravitation, affected as we know it is by so ^{The same} kind of liberty ^{as in science.} many causes. Are we unfaithful to the law of gravitation, if we point people, in connection with this first principle, to a book like Mr. Proctor's, *The Sun Ruler of the Planetary System*, for a statement of certain questions still awaiting solution? Are we to upbraid men of science if conclusions should be arrived at different from those to which they had accustomed us? Above all, ought we to try to prejudice the expected conclusions by appeals to old astronomical bigotry? Rather we should say, in proportion as we are sure of our principles, we hold ourselves free to meet all facts.

Or, again; Questions will soon be raised in connection with the ensuing pair of transits of Venus in 1874 and 1882. Eight years have elapsed since the astronomers assured the public not only, as we knew, that Encke's observations and calculations had been imperfect, but that science had been very materially in error, in consequence, as to the mean distance of the earth from our central luminary, the sun. An error amounting to about four millions of miles, as Mr. Hind pointed out, could not imply changes of slight importance.

But other changes, beyond what are thus indicated are looked forward to. People, then, who had relied with implicit faith on the modern astronomy, ^{Anticipated changes in science.} having practical proof of it in the predictions of the almanacs—forgetting, however, that the old astronomers, from Thales downwards, had in their way foretold eclipses, and that certain lunar calculations are still made on the Ptolemaic hypothesis—are waiting for the revelations of the next transits of Venus.

The position is this: we have been told that the reduction of our distance from the sun, as mathematically estimated, changes the circumference previously assigned to our orbit by twenty-six millions three hundred and sixty thousand miles; our mean hourly velocity being also less by sixty-five thousand four hundred and sixty miles than previously determined. We are assured that the diameter of the sun is really less by thirty-eight thousand miles than the books told us ten years since; and that the velocity of light is less by eight thousand miles *per second* than previous calculations had reckoned; and as the astronomers were trusted before, they must be now. The distances, velocities, and dimensions of the whole planetary system, when revised by them on this basis, must, however, await the further disturbances. We remember with

interest the early chapters of *Terre et Ciel*, and almost feel, with a kind of shock, that they must be considerably rewritten. The ordinary manuals must, of course, one would think, pause for a while at the statement of Mr. Hind in the public papers, that the mean distance of Neptune, for instance, is less by one hundred and twenty-two millions of miles than the calculations of Adams and Le Verrier had supposed. Very few are prepared to take the whole subject into their own hands.

V. It is fair to ask—Are astronomers disheartened by all this, as to the foundations of their science? Changes in theological interpretations hold a parallel place. Surely not. Yet it is to be feared, from some past experiences, that had any errors of like gravity been canvassed among us as to the interpretation of some passages in Genesis in connection with past geological ages, a loud chorus of very unworthy banter would have been heard.

Ours, at all events, is another feeling. We have referred to these things to show what we mean when we claim a free exposition of the details of our knowledge, even when they seem to be of widely extending import. To us, these grand and fearless examinations of nature and truth, in a word all honest explorations of fact, are subjects of both admiration and gratitude. We cannot look upon what prove to be sublime failures of earnest searchers into the laws of being, without a feeling akin to reverence.

Perhaps, however, the parallel which we are claiming may be disputed; though in general terms, and in suitable matter, the claim to liberty might be conceded, as indeed, it cannot be withheld. We may be told that we could not, as rational beings, decline the facts around us, or refuse to own mistakes

There is a moral order of things, the whole of which demands examination. respecting them when pointed out. The parallel then only holds good where real facts are dealt with. We are content with this. For there is a moral order of being (to which all Religion belongs), indirectly perceived perhaps, but powerful, active, real; and its abiding facts can no more be denied than those directly taught us by the senses. The irrational fancy of a former day that a religion, with a philosophy like ours, was all “invention of priestcraft,” might be sufficiently answered by the words, “When?” “Where?” “How?”—as we shall see; but Mr. Herbert Spencer frankly bids unbelief to rely on no such flimsy plea. (*First Principles*, p. 14.)

We point then to great facts in that moral order, and primarily to a great tradition penetrating the moral life of man more widely and deeply than any other, and different in

kind from all else. That tradition, comprising with much besides a philosophy of our origin, is condensed in a Record which has a character peculiarly its own, challenging inquiry. This, we shall show, is a fact to be faced in the world of moral reality. It deals too with the question to which "nature" has nothing to say.

For if by the study of nature we had even attained to a minute examination of all the facts of present existence, there would still be anterior ques- Position of
the Bible, in
the moral
order. tions, in which we are so interested that we are constantly and naturally turning to them. Science may call them "unknowable," but there is that within us which will not here be put off with any mere terminology; and we have here also a fact.

We can no more close our minds against facts of the moral than facts of the visible nature. We find too a correlation of human nature in its truest and noblest essence, and the great Tradition enshrined in that mysterious record, viz., the Bible. That Book, when you steadily look at it at all, is a *Fact*, far too venerable and surprising to be passed by without some attempt, at least, to give account of it. That it is often difficult, we fully grant; but so is nature: so is many a truth slowly and carefully spelt out. Nature we say is true; but we do not understand it all. The Bible we also say (for no reasonable alternative is shown) is true; though now we "understand but in part."

VI. They who have but slightly examined the Bible need of course that we should give some reason why The Bible a
fact to be ex-
amined. we claim for it this position. Their moral world seems to be their inner self compared with society. They have confronted it but little with this fact which comes from without; and they are sometimes apt, too, to look on those who recognize it as theorists only. They would not deny that a true theory is the *rationale* of certain facts, but they look not at our facts. Mr. Herbert Spencer complains in one place that some rest on the negation of other men's theories, without pointing to the realities which belong to their own. Well, then, we will ask men now to look to certain very broad facts, patent to every eye that is turned on them. And when we have made them look at the Bible as what it actually is, we will appeal to them, whether it betrays credulity in us to accept the only conceivable *rationale* of assured facts, uncontradicted by anything within our knowledge, and corresponding to our moral nature's ineradicable tendencies?

First, then, this Book, the earlier portions of which are older

The Pentateuch. than any other Book in the world, deals at once, as we have said, with that problem of our origin to which we turn so perpetually, notwithstanding our being baffled in every appeal elsewhere for its solution. How this most ancient volume has power to interest us, as it deals with our Beginning and our End, when later teachings on the same subject are valueless?—is an inquiry that at once arises. We look perhaps again, to be quite sure of its date; and there is no impeaching the fact that the Samaritan Pentateuch, the Septuagint, and a widely-scattered nation of unwilling witnesses, carry back its antiquity to times immediately following the fall of Babylon; that is, some generations at least before Herodotus, “the father of history,” had written his dim account of what he could gather of the past. Frame some idea, if possible, of the civilization of that era; look at its best relics, in some uncouth inscription of a stone dug up at Nineveh, or a Greek anecdote or two about Egypt. Then turn to the Pentateuch. Already you cannot help perceiving that this Book unaccountably exceeds all that existed in the world, all that has survived of its history, law, religion, and thought, down to the fifth century before Christ. But go on:—

VII. The Pentateuch is only the beginning of the volume The rest of the Scripture. before you. You do not find it, even at the date we first meet with it, unaccompanied by other documents. Psalms, Prophecies, and religious tractates of various name accompany it, full of incident and allusion, touching at a thousand points, physical, ethnological, social, and moral, the previous course of the world for many centuries. Still more urgently rises the inquiry, What will account for this book? No Zoroaster or Confucius will be equal to it. Prone as men are to assign to some intellectual chief everything ancient that surpasses average human capacity, the facts do not admit of it. It begins with its own account of the world’s beginning; it selects its own line of events, keeping to it with a surprising unity that never diverges, and it reaches on and on to the future which it tells of; and all with a steadily advancing precision. How wonderful, could you see that book as Ptolemy saw, or could you get sight of it as when first the outer world gained a trace of it, in the possession of the old Babylonian captives two thousand four hundred years ago! Only then, perhaps, would any one fully feel at this time how entirely the Bible stands alone. But further:—

VIII. Can you trace its history back from that time Its previous history. through the millennium from Ezra to Moses? Search well, for this is the book the *rationale* of whose

existence you have to find. Others have sought it, but there is not even a theory that pretends to cover the case as yet. Criticism itself, for age after age, has stood poring on this mysterious fact—this mighty Bible,—if so be its literary *origines* could be explained,—and still in vain it muses, as if silently gazing on the granite of the everlasting hills.

The people in whose hands this volume is first found had been slaves four hundred years in very remote times, and made their escape in a body. One of themselves was their leader, who in the desert, to which he conducted them, began this Book, about seven hundred years before Homer and Hesiod. That people, in some way, have kept what their great lawgiver gave, and other writings which were gradually added to it; and at this time, after the lapse of more than three thousand years, they cherish the whole, under the most difficult circumstances. How it was originally written, by what means preserved, part by part, through the ages between the dynasty of the Pharaohs and the reign of Cyrus the Persian, they really know not. There it is in the hands of that isolated people (of whom, indeed, it gives no flattering account), and its reception is by no means limited to them.

For that Book has influenced the hearts and minds of untold millions of men, and of various nations, for ages, by its own inherent power. Not in the sense in which all the past may be said to tell on the present; not in ^{its present influence.} the sense in which old civilizations reappear in the new, by transitions and associations. No, it entirely holds its own, as absolutely as a kind of outer conscience for man. It changes not. As representing an old civilization, it would only be a witness of what is past. It is by its truths, both explicit and implicit, that it lives now. "Greater nations and mightier" had philosophies, literature, and gods; and their story has passed into archæology, and their science scarcely excites the curious; while the Psalms and Prophets of the people "trodden down of the Gentiles" have power to stir deeply the inmost conscience of man, and to kindle in thoughtful hearts anxieties altogether different from everything that ancient times have transmitted.

We who affirm the only possible explanation of this Fact—viz., that it transcends merely literary scrutiny, and stands by its own felt TRUTH, ask all opposers for their *rationale*—some account of it, which they are prepared to try as a theory—while we shall look on, with a sense of the solemn and inexorable triumph of Fact.

IX. This "Bible made for man," of human materials and earthly form, but with more than human and earthly power,

upholds its influence over the actual present, and over our hopes of the future ; an influence which it is quite useless to ignore. If men will refuse to trace in this Record the strata of a moral world long since departed, they must, at least, see the quick reality which is ever on the surface, and may compare it with the enigmas exhumed at Nineveh or Thebes, or with the morally useless dust of India. For here, whatever men's opinion pretend to be, is the basis of the best present civilization and progress of our race ; and here, too, some find an unfailing source of the deathless hopes, to which our purest nature will ever aspire. We know, indeed, that this Book has a teaching which strangely lights up all other knowledge ; it quickens with some meaning the perishing religions and histories of elder times, and gilds even the dead mythologies of the world with some reflected rays. We know that it gives marvellous direction to us in exploring the most difficult problems of human nature now, and therefore is studied with profound interest by the best and the wisest in their best and wisest hours : but far more than this, amidst the moral toils of this weary time, in countless spheres of purest duty, this Bible is a fountain of daily refreshment and unfailing solace to man, a very river of water of life.

Surely they who impute to us too easy a faith in its TRUTH, when we assert it as the only *rationale* of its existence, might more justly acknowledge our forbearance, while we endure at times the insufferable manners of those who will not study this unexplained fact, who do not even read, except in the poorest way and with sidelong carelessness, "that most august handwriting traced for us along the wall of the ages,"*—characters which shall yet surprise the unthinking world.

X. It is now time that from this brief outline of fact, we proceed to formulate the Principle, and its corollaries, which we defend as "the Christian Philosophy," learned from this sacred volume, leaving minor questions for the *exegesis* of the future.

(1.) The eternity of the world, or its self-origination in any way, is inconceivable, and, as Mr. Herbert Spencer admits, involves a contradiction. (*First Principles*, p. 30.) Nature contains no intimation of self-creating power. On the other hand, Nature teaches us a principle of causation suggesting, at least, the idea of creation by external agency,

* See the *Bible and its Interpreters*, pp. 112 to 119, &c., for the fuller illustration of the mysterious and indeed supernatural history and influence of the Divine Word.

since something has always existed. This cannot involve a contradiction, unless two distinct opposites can both be "unthinkable" *eâdem materiâ*, which can only be here supposed by imagining that Nature itself suggests a contradiction, which is an idea wholly "unthinkable." They who have affirmed it, must be at fault in their ontology. The Bible then opens with this:—"In the beginning God *made* the heavens and the earth." The existing facts of the world, and our interest in them and their origin, are assumed, and God, the Creator, is pronounced. No definitions, no axioms, no arguments introduce this revelation. Here is Super-naturalism; and it must be frankly asserted on the one side, and denied on the other, by those who differ; else they are not dealing fairly with each other.

This cannot be thought a mere opinion, or the isolated utterance of a debatable passage introducing the sacred volume; for it entirely pervades the Bible. It is so interwoven with its majestic monotheism throughout, that to deny God to be the Creator of all things, is to deny the foundation of the Christian Philosophy. And not only is there nothing whatever in nature or reason opposed to it, but its harmonious acceptance by our moral agency, and congruity with its needs, will give a direct answer to certain paralogisms as to *à priori* truths which are directed against it. There is a fine sentence of a writer already quoted which well completes all that we could wish to express as to our convictions here,—a sentence which may almost stand for a philosophical definition of Faith itself—"Besides that definite consciousness of which logic formulates the laws, there is also an indefinite consciousness which cannot be formulated,"*—and we have it here.

XI. (2.) Of course no other principle stands precisely on the same ground as this, but there are some which are scarcely less vital to the Christian position. We find that this Divine Creative Act proceeded gradually, and included in its series not only phenomenal and structural being, but forces or powers "invisible" save in their acts; so that while it is distinctive of some created beings to remain inert, it is an endowment of other beings to be, according to their nature, active, and that probably in countless ways; for this "life" is undefined. We have the dry ground on the one hand, and the "moving thing that hath *life* on the other." It is represented to us, that this production and arrangement of our world and its present occupants proceeded, out of previous "darkness" and "confusion," on to unconscious being set in a certain

* *First Principles*, p. 88.

order; and then onwards to the highest forms of conscious being at last. As to the manner and duration of these processes directed by the "Maker of all things visible and invisible," much may remain for exegesis; but the principle of Gradual Progress onward to the present fixed Order of things seems unequivocal.

The reasons *why* The Creative Power thus showed itself, not as one momentary forthgoing, but step by step, leaving traces in the past of all the marvellous advancements, each depending on the supernatural (though some modally differ from others even in this), we have not here to inquire. Divine and moral reasons of it are abundant in the Christian Philosophy.

XII. (3.) But in this Order of things, when finally reached, we recognize the indwelling Activity of some creatures, as an endowment distinct from the visible structure. It is called "life"; and here we are told of "movement" as a primitive sign of "life"—the word being used *generically*. Then next, this generic term is made specific in such phrases as, "the living thing that hath seed *within itself*," and acting "after *kind*"; showing a localization of life, and *difference* of its kinds.

Whether this created life was at first latent, whether its earliest activity was uniform and mechanical, whether perpetual or intermittent, or liable to obstructions, and so on, are subjects of legitimate inquiry. We are bound to this only,—that both lifeless things, and things that have "life" in every "kind," and the special endowments of each, are equally creatures of God; their origin is Supernatural.—Some developments of this principle we may glance at by-and-by.

XIII. (4.) But there is one further principle which seems unquestionably taught in the sacred Scriptures, and, indeed, it prevails throughout: viz., that among the many specific forms of life there is one, in the *Kosmos*, which dominates the inferior; and has the requirement laid on it by the Creator, that in some things it *ought* to dominate. In whatever degree the highest being created here, viz. Man, resembles in visible character the inferior creatures, yet a life breathed into him by the Creator was distinctly his own. He has the "image," the "likeness" of God; is made a "little lower than the angels." He has cognizance of "Good" as good, and personal consciousness, which can compare with his own thoughts the matters which are presented. Man can choose, in a sense peculiarly his own.

Here also, however, lie questions on which inquiry must be free, and others where it cannot be so. This con-
A prior being is a fact implied in the phenomenal. scious being, man, has power to investigate and judge; that is, he is a thinking being. That

interior judgment, which is the very condition on which any investigation must proceed, is a preceding reality, which by no means depends on our understanding it: our *à priori* self, our permanent being, may be hidden; but is a *fact* to begin with. Our earliest thought assumes it. It is anterior to the phenomenal by the very nature of the case; and its being is not merely relative, for it exists prior to relation. And hence we must refuse the philosophy of the "Relativity of all knowledge," and the philosophy of "the Regulative"; for it is a contradiction of all metaphysics, a basing of the moral world upon nothing, if not also a superseding of the real by the phenomenal.

We have been most explicit, we trust, in stating these four principles of the Christian Philosophy — the Supernatural beginning, the Gradual process, the created Varieties of creatures and of life, and the original Supremacy of man over creatures, all good in their kind—man, as a distinct moral being nearest to the Divine; as it is elsewhere expressed, "God made man upright," though he has "sought out many inventions." We are not aware of any ideas of reason, or any facts in nature which even seem to contradict these principles.

XIV. The point where we suppose exception will be at present taken lies scarcely in the first of our propositions; for the material beginnings of the universe are almost left by our popular teachers for metaphysics to settle. The antagonism begins at the next statement, and there is a demurring to the representation we make that life itself is a definite creature of God, *i.e.*, a being (or multitude of beings) called into existence by a Power above and beyond nature. Our position, of course, implies that where life is not, it is never known to arise from any combinations of other, that is lifeless, beings; and we believe that science confessedly is with us, and so confirms the Christian Philosophy as to leave it not only unassailable on its own ground, but unassailed on any other.

There is, indeed, a sort of persistency in the hope and the hint (which the credulous and ignorant willingly take for fact) that science can trace life to a natural origin, that it seems right to repeat what the first among our men of science, Sir Charles Lyell, Professor Huxley, and others, fully acknowledge thus far on this subject.

Their primary statements are such as the following:—

In carbon, in hydrogen, in oxygen, and nitrogen, there is no life. Then, the compounds, carbonic acid, water, and ammonia, are lifeless; that is to say, the union of carbon and

What exception is taken to our four principles.

First, as to the beginning of life.

oxygen in the first, or of hydrogen and oxygen in the next, or of hydrogen and nitrogen in the last, will not yield life. As to the imponderable bodies, light, heat, electricity, even if ultimately found to have life in them, they would not *be* life so far as we can now judge; or if they were, or any of them, to be identified with life, they would, in the Christian philosophy, still be creatures of God, taking their origin from beyond visible nature.

Or again—Supposing that protoplasm, as Professor Huxley describes it, simple or nucleated, proved to be the formal basis of life, still, for all that, it is not life. “Clay in the hands of the potter” it still remains, and the life eludes analysis. Take hydrogen and oxygen in certain proportions, pass an electric spark through them, and they become water; the water is of the same weight as those two gaseous bodies, and yet is found to differ from them. Hydrogen and oxygen at freezing-point would not cohere, but quite the reverse; water coheres into ice. Professor Huxley, with the plainness which is becoming, admits, of course, that there is something more than the ascertained constituents,—there is a “modus operandi” of the electric spark which no one understands.

And if this mystery is confessed as to life, even in its simplest, or, as we expressed it, generic form, still more must we expect it in the more specific creations of life, each of which would appear to have its *proprium*. Even conceding, as we freely may, all that is said of a similarity of “visible character” in species very widely different—if we take, as Mr. Darwin does, the physical embryo of the canine and the human body as an illustration of this, it leaves the question of the hidden “life,” in each case, just where it was, and even enhances our conception of the power of specific life in directing the development according to the intention of Him who “quickeneth whom He will,” and *as* He will. The less the difference discerned in the “visible character” the greater the difference, and the greater the specific power, of the invisible life in each case.

Exception as to species of life. XV. Thus much, then, as to the origin of life and the exception taken to the Christian Philosophy, that it is a Creation.

As to the Varieties of species, though we are bound to no particular theories, all present knowledge corresponds with the ordinary belief that classes are not only very numerous, but very distinct, even when analogous and below the rank of man. Very often, indeed, they may be difficult to define, or at times seem to lap over, and at times to simulate each other. But the fact is that they all, as a rule, keep ultimately to their own

grooves. Whatever may be imagined or desired by some, we must not be guided by imaginations and desires. The *facts* do not inform us of a genealogical tree of physical life throughout; they rather suggest to us parallels of very distinct vitalities, sometimes influencing, but not passing into, each other, much less forming a chain. The spaces between are such as the discernment of real science feels to forbid at present any such speculation.—But of this also we shall speak further as we advance.

There are other exceptions, doubtless, to the common Christian belief as to the first ordering of our world; but they ought not here to detain us, because they are not on points of principle, and are open to fair debate among us all. As, for instance, questions concerning “the separation of the light from the darkness,” and the elemental arrangements, as shown to the seer on Horeb, “evening and morning,” day after day. But we must pause a moment on one topic, viz., the alleged “Antiquity of man,” because it bears on Christian doctrine very usually received. The inquiry which here concerns us simply is, what is the doctrine which the Christian Philosophy has to defend in this respect?

XVI. Supposing—so it is put—the induction of facts led men of science hereafter not merely to the guess, but to the reasonable conviction, that improvable human nature of a lower type than any now known had existed at a very far remoter date than could be reconcilable with any version of the Bible chronology, what is our position as Christians accepting the Sacred Book as true?

Our answer is a very direct one. There are, as every one knows, two representations in the Bible of the Creation of man; one in the first chapter of Genesis (vv. 26—30), and one in the second (vv. 7, 8, 15—25). Every one, too, is aware that these two passages had been found of difficult interpretation long before people had any idea of scientific speculation as to the “antiquity of man.” What we have to say, then, is not consequent on any pressure of opponents; nor do we say at all for ourselves. But every one ought to know that in interpreting these two passages (which, it has been thought, may afford elucidation of the position of this difficult subject), much latitude has always been allowed, both among Jews and Christians. We are precluded in this place from exegesis; but historical facts are not forbidden, we trust, anywhere.

XVII. Three different opinions are mentioned in the Ordinary Gloss, as held among the Rabbins; and there are certainly several more. “Both Jews and Christians,” says Warburton,* concur in this, “that Eve was not created

* *Div. Leg.*, B. ix. p. 51.

till Adam was put in possession of the garden of Eden "; and he refers to Le Clerc and Hooker, while he refutes this doctrine in favour of one of his own. He considers the representation in the second chapter to be intended to separate man, even his creation, from all other beings, and to take him, if we may so say, (at least in that civilized state in which we find him in Paradise), out of the ranks of inferior beings : and St. Augustine says the same. Warburton affirms that we may gather also from the Bible representation, as a whole, that human beings were not, immediately on their creation, put into Paradise, but had a state and condition on earth preceding, what he and the Fathers generally term, "that Supernatural establishment."—We are bound to no such expositions, and by no means acquiesce in them ; neither is it easy to adopt St. Augustine's words as to the first state of human creation when he says, in the Gloss, "*quamvis mulier nondum esset à viro divisa, sed materialiter præseminata.*" (But see *Peyreyrius*, in the same sense, who wrote in 1655. See also Möhler's *Symbolik* ; and Bellarmine, there referred to.)

The conclusion, then, to which as Christians we are bound, forecloses no inquiries as to the human state *previous* to that time when our first parent was placed by God in a cultivated home. That state, whatever it be thought,—which Warburton describes as "not only prior to but different from his state in Paradise,"—may not hinder our faith in the teachings of Scripture as to our descent from "man, the image and glory of God," placed by His favour in a home of noble existence from which by transgression he fell. Supposing certain claims to extraordinary, yet human-looking, antiquity to be made good; they could but reach his "visible character," not his Divinely breathed "Life." But there really are no signs,—no traces found of a creature of our entire outward form, even in the newest tertiary beds (except those nearest to our present surface). Not that any such creature even then would be, necessarily, what *we* are. The great assertion of Genesis remains yet unshaken, that *our* first parent was placed by his Creator in Eden, with mental, moral, and physical powers amply developed—able at once not only to move and breathe, to sleep and wake, but to work, and think, and speak, and know.

XVIII. Such, then, are the Principles of the Christian Philosophy, briefly stated, and vindicated against exceptions which might *primâ facie* seem to lie against them. But we do not intend to have them sheltered from the strictest examination of reason, or spared from comparison with all the facts of nature,

The opponents of our principles are to hear our exceptions also.

which, however far they exceed, we steadily repeat they never contradict. Neither shall we consent that those theorists who, in the name of science, affect to deny the philosophy of our Origin, shall themselves be unexamined. The newly formulated scheme of Lamarck and others, put forth with so much skill and attractiveness of style by Mr. Darwin, must submit to be questioned as closely as the rejectors of super-naturalism would question ours. We deny that their scheme is reason; we deny that it is science.

We first would ask distinctly what it *means*?—for though there are some passages fearfully plain indeed in Mr. Darwin's last book, there is so much of hint, guess, and pretension pervading it, that its drift is generally slightly veiled. If the book were all as outspoken as a few passages are, the reader would not be unawares influenced towards a conclusion hostile to his whole faith as a believer in the Scriptures. He would pause, and make his choice, and not allow himself to treat as innocent or generally useful a work which to the mass of readers must be misleading, even when to others instructive and amusing.

We have a right to know, for instance, whether the "evolution" and "natural selection" spoken of, would be meant to deny a Supreme Cause of all, Who is above and beyond all? If this be not the meaning, what is Mr. Darwin's philosophy? Would he by these terms persuade us of an eternal cycle of ever-revolving being, proceeding from nearly nothing, up to the highest moral and intellectual life, and back again to nothing? His own instructor apparently, in some things, whom he not unjustly calls "our great philosopher," would not support him here. Mr. Herbert Spencer has exposed, as thoroughly as a careful thinker could possibly do it, the tendency of both philosophers and men of science to mistake analysis for synthesis. He, at least, is not guilty of ignoring the problem of pre-phenomenal being, and would be the first to rebuke the shallow fancy that to accumulate facts, and hint about them eloquently, is philosophy.

XIX. It may be useful, as we too must select, to dwell more fully perhaps on Mr. Darwin's hypotheses than on some others at the present moment, as they have a popularity among an extensive class of readers. It is well to show, at all events, that so far as this able naturalist attempts a history of our Origin and Descent he fails. Let us, then, hear the great writer to whom he sometimes appeals.

Mr. Darwin's
appeal to "reason"
examined.

"An entire history of anything" (says Mr. Herbert Spencer) "must include its appearance out of the imperceptible, and its disappearance into the

imperceptible. Be it a single object, or the whole universe, any account which begins with it in a concrete form, or leaves off in a concrete form, is incomplete; since there remains an era of its knowable existence undescribed and unexplained. Admitting, or rather asserting that knowledge is limited to the phenomenal, we have, by implication, asserted that the sphere of knowledge is co-extensive with the phenomenal—co-extensive with all modes of the unknowable that can affect consciousness. Hence, wherever we find being so conditioned as to act on our senses, there arise the questions—how it came to be thus conditioned? and how will it cease to be thus conditioned?” (*First Principles*, p. 278.)

Again:—“We cannot take even a first step without making
Extracts in
proof of our
position, as
philosophical. assumptions; and the only course is to proceed with them as provisional until they are proved true by the congruity of all the results reached” (p. 552).

Again:—The philosopher, “being fully convinced that whatever nomenclature is used, the ultimate mystery must remain the same, he will be as ready to formulate all phenomena in terms of matter, motion, and force as in any other terms; and will rather anticipate that only in a doctrine which recognizes the Unknown Cause, as co-extensive with all orders of phenomena, can there be a consistent Religion or a consistent Philosophy” (p. 557).

Again:—“If we admit there is something uncaused, there is no reason to admit a cause for anything.”

Now we are far from wishing to imply that this careful writer thinks the “theory of creation by external agency an adequate one,” or the idea of a self-existent Being “conceivable,” but we point out that he shuts up himself and Mr. Darwin to the dilemma that without a Supreme cause antecedent to Phenomenal being, he has “no Philosophy.”

“A change without cause,” says Mr. Herbert Spencer, “is a thing of which no idea is possible:” and to our mind a philosopher who so speaks is not “far from the kingdom of God”; and we may be forgiven for adding that a revision of his Ontology (deeper and truer than in the quotation he gives) may ultimately lead him to see that the self-existence of the Supreme is not “unthinkable.” *

* The Ontology of the schools, which is so often summarily dismissed by a tradition as to its uselessness, was really displaced by the impatience rather than the reason of the Renaissance and the Reformation. The same inquiries as to pre-phenomenal being which were then discarded by the religious world, are being vindicated now by reappearing in an avenging form among non-Christian thinkers. Whatever the defects of the great schoolmen, their Ontology will yet have to be examined, especially as it appears among the

XX. One other passage of Mr. Spencer's which we cannot forbear quoting, from its intrinsic value in relation to our subject:—

A general defence of that position.

There is a "consideration which should not be overlooked—a consideration which students of science more especially need to have pointed out. Occupied as such are with established truths, and accustomed to regard things not already known as things to be hereafter discovered, they are liable to forget that information, however extensive it may become, can never satisfy inquiry. Positive knowledge does not and never can fill the whole region of possible thought. At the uttermost reach of discovery there arises, and must ever arise, the question—What lies beyond? . . . Throughout all future time, as now, the human mind may occupy itself, not only with ascertained phenomena and their relations, but also with that unascertained something which phenomena and their relations imply. Hence, if knowledge cannot monopolize consciousness, if it must always continue possible for the mind to dwell on that which transcends knowledge, then there can never cease to be a place for something of the nature of Religion; since Religion under all forms is distinguished from everything else in this, that its subject-matter is that which passes the sphere of experience."

This may well suffice to dispose of the appeal of the mere Naturalist to reason. But we are by no means content to leave the subject where the hereditary unreason of a self-satisfied collector of details might be apt to intrench itself, viz., in the assumption that he is practical, and strong in his facts. The facts are also ours; they are common property, invaluable, though they may need a great deal of sifting. It may be convenient to opponents to forget that the Christian Philosophy asserts a complete plan or scheme of distribution in all nature, only that it claims to have also the clue to that which "lies beyond," and so is more, not less, complete than other philosophy.

Not only by an appeal to reason, but to fact.

XXI. Creation, according to its very idea, in the Christian Philosophy, is a projection into finite being from Him who essentially is. Any other conception might easily become pantheistic, and so, involving a contradiction. Finite being, whether merely phenomenal, or also active, still stands, however, in some relation to the Supreme. Not that God is ever person-

Some relation of the Supreme to the phenomenal must still continue,

Thomists. A translation of the *Contra Gentiles* of Aquinas, long partially prepared, and compared with the tracts *Contra Averroistas* and *de Potentiâ*, may yet appear as a contribution to the great work of Theistic defence, if the present writer should ever be at leisure to complete it. Meanwhile, it is right to point attention in this direction. (See the *Complutensian Questions* of the school of St. Thomas, on the Eight Books of Aristotle's *Physics*.)

ally interfering, to do all that is done in the Universe, for that would be a denial that He has really given to the phenomenal a law, or any fixed order: it would deny that life was an activity, and creation a reality truly accomplished and done. Yet, on the other hand, the sustaining of the created thing as created, and the "upholding of our soul in life," are implied in the creating act of the Supreme; since the contrary thought dispenses with the Supreme as soon as He has created; in which case He would not be Supreme. Thus, self-upholding is a contradiction, as great as self-originating; as any one will find who attempts to form the idea. Our business then should be to question the facts as they are presented to us, and mark the answer they give; especially those that concern "vitality."

The "Generic Life," which, according to our Philosophy, God has made and now upholds in its ever-acting *in generic life,* energy, is shared, we fully admit, in certain ways, by the highest moral agent as well as by the lowest organic growth. But this is not the sum of our vital being, otherwise all would be alike. Plainly, however, a vitality which we inhale bodily is also in the field-flower which we gaze on. Our life of limb, and lung, and brain, is constantly kept up by our acquiring and assimilating that unseen generic reality which acts towards us on fixed laws, or (to speak more exactly) in the same ways.

But higher and stronger forms of life,—facts which are distinguished by the term "specific,"—Life which *and in specific.* is not only active but volitional, and not only volitional but conscious, undoubtedly dominates, so as frequently to change the direction of generic life. The lower and wider life acts more blindly, though here there may be countless varieties. It may force its way at times by sheer activity, even where it is of no known use, as if abhorring a vacuum. It seems to be its nature to energize always, though arrested by specific agency not unfrequently, and by the *inertia* of phenomenal being at other times. So also inferior forms of more specific life may briefly exceed themselves; but have to fall back again when met by higher specific life. Their own tendency, indeed, seems to be, immediately they find a check, to recover their own form. Though no two individuals of a species may be entirely alike, yet in the whole groove of a certain kind of life the same type is ever ready to produce itself. In departures from that type there is no fecundity. Now, neither Professor Huxley nor Sir Charles Lyell will be suspected as unfair witnesses—indeed, they are appealed to, and would here agree, that no evidence has ever been produced that any group of

animals has by self-variation, or by selective breeding, given rise to another settled group of a higher and distinct kind.

XXII. It will be observed then that the Christian Philosophy rests on every known fact of the physical, as well as the moral life; and of this latter ^{Mr. Darwin's estimate of} much more indeed ought to be said than our present address would allow.

Naturalists who know nothing of theology, and theologians who know nothing of nature, may not sympathize with our enthusiasm for both. But the subject is far too grave to be dealt with in any other than an earnest spirit. We should be culpable if we shut our eyes to the issues raised by such a popular work as *The Descent of Man*. How the writer can profess that he is "driven to his conclusions," it is painful to think. Facts being as they are, it seems to us, whatever it may be to others, as if nothing but eagerness to be rid of the thought of God could lead to such interpretations. To turn away from that thought,—is it not to blind the conscience?—but only "draw nigh to God, and He will draw nigh to you."

We have frankly stated our own views and principles, and we will, with equal plainness, state Mr. Darwin's in his own words:—

"Man is descended from a hairy quadruped furnished with a tail and pointed ears, probably arboreal in its habits, and an inhabitant of the Old World. This creature, if its whole structure had been examined by a naturalist, would have been classed among the Quadrumana, as surely as would the common and still more ancient progenitor of the New and Old World monkeys. The Quadrumana, and all the higher mammals, are probably derived from an ancient marsupial (kangaroo) animal, and this through a long line of diversified forms, either from some reptile-like, or some amphibian-like creature; and this, again, from some fishlike animal. In the dim obscurity of the past, we can see that the early progenitor of all the Vertebrata must have been an aquatic animal, provided with branchiæ, with the two sexes united in the same individual, and with the most important organs of the body (such as the brain and heart) imperfectly developed. This animal seems to have been more like the larvæ of our existing Ascidians than any other known form."

Such is the result, such the conclusion to which Mr. Darwin says he is "driven." And he declares that "any longer to believe that man is the work of a separate creation" is to adopt the ignorant hypothesis of a "savage"! (*Descent of Man*, vol. ii. pp. 386, 389, 390.)

XXIII. As to the direct, not to say rough, antagonism to the Christian Philosophy here avowed, we apprehend there will be no question. Some persons might yet be curious to see traces of the progress which has "compelled" so dire a result.

Mr. Darwin's present work, it should be remembered, is one of a series. It is preceded by the *Origin of Species*, and is to be followed by the *Expression of Emotions* in animals; and facts of natural history are here placed in quasi-progressive order, to suggest what is termed the doctrine of "Evolution"; a doctrine, he owns, to which "many of the older and honoured chiefs in natural science are opposed in every form" (vol. i. p. 2); and who are exposed, therefore, to the suspicion (ii. 386) of being intellectual "savages."

The writer says that he *takes for granted*, as the indispensable basis of his doctrine, the "high antiquity of man." Some theologians (§ xiv.) have done the same; and we will only remark that "taking for granted," though allowable for a time, is not necessarily a sound argumentative process. It is singularly open, too, to the delusive influence of those inexhaustible *ignota sæcula*, the foregone ages, in which theorists find so secure a refuge from the pursuit of logicians. He then relies on a second assumption; viz., that every other species is *descended* from some pre-existing form. His method in venturing on this assumption is worthy of note.

Professor Huxley and Sir Charles Lyell are quoted for the statement that in the "*visible* character," i.e., we suppose, the bodily conformation, "man differs less from the higher apes than those do from the lower members of the same order of primates." Taking this as a first premiss, the next should surely be that "the lower members of the same order of primates have been found to advance themselves into higher apes," and then the conclusion would be, "therefore, higher apes may be expected to advance themselves into the visible character (= bodily shape) of man"; a conclusion which, if reached, would leave all that is distinctive of our race—the conscious personality, the divine sense of all-commanding duty—as remote as ever. But Mr. Darwin has no minor premiss in his argument that will avail him. If he had it, if Professor Huxley and Sir Charles Lyell could assure him that they had specimens such as his argument needs, so that he could arrive at his desired conclusion that some higher visible organizations may permanently develop from the lower, still might the Christian Philosophy be long untouched, since we already know that "out of the ground" was every "beast of the field" (and we know not all

Antagonism
to Christianity
in "Evolution
of Man" as
thus propound-
ed.

Illogical
treatment of
facts.

their shapes), and also every "fowl of the air," as well as man,—"the life," always acting according to the will of that Higher Power "by Whom and for Whom" they exist. At present, however, any such physical derivation, or even apparent evolution, as here suggested with so much haste, is in want of proof. One single fact of the self-advancement of a species into a higher order would have saved the speculation from the ignominious position in which it now stands—as a conclusion in search of its premisses.

XXIV. Let no followers of this theory flatter themselves then that we at all consider them as "reasoners" who are "going too far," misled by "the pride of intellect," and so on. It is just the reverse. We say to them, "Reason to the utmost of your power, (as St. Augustine did), none of your mere theories for us; facts and hard logic, if you please; keep to *it is*, and be a little less given to *it may be*, and you need not part company with us; we may be good friends even yet."

It must be observed that we have not complained of Mr. Darwin's terminology, though the terms "natural selection" and "evolution" are open to evident ^{Mr. Darwin's} terminology. misapprehension. We only find fault with his aversion to sound reasoning. Abstract terms like "selection" and "evolution" are always liable, of course, to mislead, and no carefulness in adopting them will altogether obviate this. The best way of guarding ourselves against latent mischief in abstractions is to get into the habit of translating them sometimes, and seeing how they look and what they mean in the concrete. "Selection," perhaps, suggests too much as to a power of conscious choice; but if we said "tendency," it might (at times) cover the idea of "intention," and that would be little better. There is no use in disputing terms which are approximately best for the meaning. When it is said that Nature "selects," it is language familiar to us in other connections, as when we are told that the stomach rejects and "selects" food in certain conditions, and distributes its elements, implying thereby no volition, but life and law of another kind. We speak, without rebuke, of the "deterioration" of certain species under certain conditions of food, air, clothing, and general treatment; and in so speaking we assume the activity of natural powers, according to certain laws. So as to "evolution." All "growth" is a kind of evolution; and such Biblical phrases as "after his kind" and "seed within itself" concede the idea. Whether the evolution permanently escapes certain grooves and moves upwards, and to what extent, are simply questions of fact, to be ascertained on inquiry, like other alleged facts.

XXV. The facts at present assure us that multitudes of species lie close to each other in the visible order of Nature. Mr. Darwin however, *assumes* that there is derivation of the more perfect from the less perfect.

Mr. Darwin's theory a logical contradiction.

—Now to the scientific logician this theory in any form is almost a self-contradiction, since a cause must needs be adequate to the effect. If the lower *generate* the higher, in what respect was it lower? It may have existed *among* the lower, but was potentially higher. And how its potentiality was acquired in the lower group of beings where it was found, would still lead to the unsolved question. It is, perhaps, always more conceivable that vitality from a higher rank may first cast its force beneath, and thence re-act in the upper direction. But where is the proof of either assumption? Anyhow a careful thinker will perceive that the passage of life upwards would imply a new and special element of power in the individual of a seeming lower class that led the ascent. So that, logically, the theory of "evolution from below" answers itself, and rather establishes the truth it sought to deny. The utmost that any evolutionist could say would be, that in a lower groove of being some individual appeared who, from some cause unexplained, *was* potentially higher than the rest, and proved it by rising to the higher sphere—a fact which confirms rather than opposes the original distinction of the grooves, the species themselves.

Perhaps, too, another part of this notion, viz., that the beings of a lower order, *i.e.* countless differing individuals, remain the same, till an abnormal individual of a higher power *somehow* appears, assumes more than philosophy recognizes at present; for we have no right to say that there would be no degeneration to a *lower* rank, even in the same species; experience rather points in that direction, perhaps, when all the facts come to be tabulated.

There is no doubt something imposing in the arrangement of his subject which Mr. Darwin adopts, and it may lead either the unsuspecting or willingly credulous reader to suppose a more exhaustive induction of facts than we find.

Facts do not become philosophy by any arrangement of them.

Yet all his facts might be arranged, and his book as a set of naturalists' observations, be re-written entire, from the point of view of the Christian Philosophy. The chapter on Homological structure might have been reasonably enlarged with advantage. It might have been of use when afterwards the writer speaks of the liability to variation in certain occasional and rudimentary structures; and we should there also have been glad to read more of what Archbishop Sumner regards as a "tendency of

nature," within certain limits, "to run into and even perpetuate varieties of configuration, size, and colour"; or (in other cases) to drop varieties and descend to a lower character. And then, again, the art of producing some varieties is well known, and a statement of it would have been useful.

We wish from the naturalist all the facts we can obtain, to assist our knowledge. He may put them in what order he likes: it will make no difference to the facts—really such; but as to his "reasoning" upon them, after what we have seen, we must not concern ourselves. It is of the same kind throughout Mr. Darwin's books;—a simple putting of the *post hoc* for the *propter hoc*; though sometimes accompanied by suggestions which simply induce a smile.

One illustration may suffice as to this. His theory would seem generally to imply that some utility to the species would mark the "survival" in the higher of any peculiarities which had been possessed in the lower. In some of our inferior "progenitors" the faculty of hearing is found very much more acute than in ourselves, and is plainly connected with their power of erecting their ears to catch sound. Strictly speaking, it looks as if this physical advantage ought not to have been lost to us. Mr. Darwin, while "coveting" the erect ears, distinctly suggests in explanation of the untractable fact that we have them not, that possibly, "during a lengthened period" (that never-failing resource!) some of our "progenitors" moved their ears but little, and "thus gradually lost the power of moving them"!

XXVI. But we must not altogether omit the views given of mental and moral Evolution. We find Mr. Darwin begins his notions on the "Mental Structure" with these words: "*We have seen* in the last chapter ^{Supposed evolution, instinct, and reason.} that man bears in his bodily structure *clear traces of his descent* from some lower form." "*We have seen*"! This probably has not surprised Mr. Darwin's followers, dazzled by his skilful and valuable array of details. But we too "*have seen*," and have no need to say more of this. If, however, he supposes it to be the interest of any class of thinkers to dispute his anecdotes which follow,—as to the instincts of birds and animals,—he is surely deceiving himself. Far be it from any of us, scientific or not, as Sydney Smith expresses it, "to envy any of the lower creatures the fragments of wit and tatters of understanding with which they are so happily provided." It were not difficult to furnish Mr. Darwin some remarkable examples from the *Curiosities of Literature*, the *Golden Legend*, and the volumes of the Bollandists, to

which he possibly has not referred, in which intelligence, and even higher faculties, are said to have been exhibited in the desert by both beasts and birds; and we might do this without exactly regarding the lower creatures as "blood relations." We need scarcely add that there is no pretended case of this lower instinct taking a permanently higher step.

Being ourselves, by constitution perhaps, obstinately rational, we have absolutely nothing more to say to Mr. Darwin's stories than that we are pleased to have them, and to reply once more to his conclusions, that they lack premisses.

A great deal of confusion has no doubt arisen in this branch of Mr. Darwin's work by the vague and purposeless distinction set up in the popular contrast of instinct and reason; as though there could possibly be a line drawn, assigning the one entirely to the lower, and the other to human creatures. No doubt terminology is a great boon to many, as it provides counters which pass current as thought. But no observer of nature will attempt by mere verbal distinctions of this kind, to deny in the higher species certain lower forms of life combined with their own, though they be variously distributed in the inferior ranks, and some of them the exclusive possession of an individual, or a class of being. Whatever "instincts" may be, their Origin has not been detected, nor their limits defined.

As to the Origination, or even the first development of mental power, it is the admission of all, that naturalists can give no account (vol. i. p. 36). Even the more advanced assertion of Mr. Darwin, that some complex instincts have arisen from natural selection among simpler instincts, is qualified by the truthful admission that they have arisen from some unknown cause (vol. ii. p. 38), and "independently of intelligence" (that is, we suppose, of their own intelligence). But, apparently, nothing whatever is gained by such distinctions of gifts among classes, towards a solution of the one great problem. The information is of interest to the observer of nature; and so also are all facts of a more than "visible character" accumulated in the creatures around us, and which ought not to be grudgingly recorded. It is important, surely, on many accounts, to treasure up illustrations of the powers of memory, attention, curiosity, and thought, in horses, dogs, and other creatures, as well as anger, love, fear, and other emotions (all as really "facts" as their eyesight and hearing). Perhaps the nearest point of approach to human intelligence in its lowest condition would be the faculty of imitation. Yet this, no less than other faculties, would show that mental and moral characteristics are so limited as

A confusion
of these terms.

Origin of
mind and con-
science undis-
covered by na-
turalists.

to be distinct from the human, with which they seem to correspond, and in some sense really do. We may compare them, and contrast them with our own; but we cannot identify them. We have heard of an elephant who, as his keeper said, would "bear malice like a Christian." But we may rather say, that the faithfulness of inferior creatures in the use of their faculties may seem to rebuke the unfaithful of a higher degree. "The ox knoweth his owner:—My people doth not know."

XXVII. And this leads us to refer to that highest distinction of our race—the moral; though we could first have wished, if the occasion allowed, to follow some ^{Evolution in morals still less possible.} naturalists into their admission of an "Unknown Cause," in order to show how little of the moral and personal they mean by it. Some certainly do not mean a Creating Power beyond Nature; much less a Moral Power; for the philosopher to whom, as we saw, Mr. Darwin refers at times, and who owns an unknown causation at present, regards the hypothesis of special creation as absolutely "unthinkable." He says distinctly (as Berkeley feared it would be said) that the creation of matter "implies the establishment of a relation in thought between something and nothing, a relation of which one term is absent—an impossible relation." But in this the philosopher scarcely has reflected, that the demanded relation of something to nothing is already implied in the idea of something, and *not less implied* by the contradiction than by the affirmation of Creation. But it is not fit here to continue this subject, as the metaphysics of origination, though so close to ethical truth, would need an analysis of Ontology, which may indeed be necessary hereafter, but is not possible now, when, as we have said, moral considerations claim attention.

While admitting the moral distance of man from other creatures, as a fact, the theory which deduces man ^{The idea is sensual.} from the beast has in it a sensuality which cannot but tend to set him free from the highest morality and from the possibility of religion. Nor is this debasing tendency relieved, but rather increased, by attempts to combine as in one class the instincts of animals and the conscience in man. We are far from wishing, as we have said, to stint our admissions that in creatures beneath the rank of man, there is a rudimentary knowledge that some things *ought not* to be, and that some things *ought*. Let it be analyzed by all means. Yet none but triflers will talk to us of "bees," *e.g.*, as having feelings of "*sacred Duty*"! The generosity and affection of some animals, the faithfulness and bravery of others—(unselfishness we cannot say, for that could not be where there had

been no possible consciousness of the idea of self),—are shadows of the higher things which the human mind can discern, but “not the very image of the things.” There is that in man which

The idea of duty is quite distinct. recognizes what has no definition, and is incapable of analysis. For “Duty,” as such, is altogether distinct from interest, it is above all desire, or affection, or utility. It is that which has our reverent homage as supremely right for ever. Yes, Duty is a law above us, as well as within us. It has an awfulness that we cannot outrage without being troubled, and yet a tenderness that reaches to the Divine, and calms and consoles the heart, like the thought of God.

We must be forgiven then if we speak out as plainly here as those on the other side; and confess that in the suggestion that this awful sense of Duty in the human soul is evolved gradually out of the emotional aptitudes of dogs and apes, there is a terrible profanity—a profanity to human nature itself, and a breaking faith with all the greatest facts of our being.

Sexual selection and its moral aspect. XXVIII. It will be seen that we have wholly passed over all the facts and speculations in Mr. Darwin’s book as to “Sexual Selection,” and its laws. This is not only because we sometimes recoil very deeply from the tone of this part—and it is the largest part—of Mr. Darwin’s book, large enough for separate treatment deontologically; but also because our examination of the general drift of the whole excuses us from dwelling on all the subdivisions, when in principle all are alike. In this department of the subject (as in the rest) we are content to know that nothing in zoology, or physiology, confirms the supposition of species morally rising to higher species by selection; and we read with profound amazement, in connection with this subject, and when we consider its Moral aspect, the suggestion of a further improvement of our own race by ascertaining, “by an easy method, whether or not *consanguineous* marriages are injurious to man.” We are not sure that we here understand Mr. Darwin; nor in another passage in the same page in which he says: “There should be open competition for all men; and the most able should not be prevented *by laws or customs* from succeeding best, and rearing the largest number of offspring” (ii. p. 403).

We prefer then to conclude this part of our subject with a sentence of a kind which we better understand:—“A moral being is one who is capable of comparing his past and future actions and motives: of approving of some and disapproving of others: and the fact that man is the one being who with certainty can be thus designated, makes the greatest of all

distinctions between him and the lower animals": we will not weaken or neutralize this by following the passage to the end—to find in the "pointer dog" the rudiments of such conscience.

XXIX. The inquiry, no doubt, is a perfectly legitimate one, as to the *rationale* of the facts, both moral and physical, of a world in which no two beings are exactly alike, and in which, nevertheless, there is ^{The rationale of a graduation of being.} a graduated order probably of all beings, or a series of orders nearly touching each other, from the most rudimentary forms to the most complicated and perfect. If it had pleased the Author of all Being so to create life at the first, that it should have in it, by His Own endowment, a power so to unfold, no one could think it irreligious to affirm "evolution." (§ xiv.) And though there are no signs to be found of this power of life to exalt itself, the order and plan, the gradual arrangement and fitness, may still be recognized, being plain both in Nature and in Scripture. Our being, as said, "formed from the dust," our being "fashioned beneath in the earth," our "members," all the rudiments of our form, being described as made "secretly," told, and "numbered," by the Author of all Being, would suggest to us much of *process* in the first creative work; while the fact of growth further suggests the bestowal of *power* in some directions, reminding us that creation was not itself all inert, and that the later processes might, some of them at least, be gifted to advance without new interventions of Creative power. Why it pleased the Supreme Cause to create gradually, as He has said, rather than suddenly; why to create lower intelligences and higher—lower moral life and higher, may in some degree be ascertained perhaps by reverent inquiry hereafter; and the whole range of topics is worthy of that kind of approach which the Bible invites, and may be the subject which comes next before this generation—our part, that is, of the problem of the Origin and End of our world and ourselves.

We have affirmed our Philosophy; we have defended our principles. But it is time we should pause.

XXX. The circle of enlarging knowledge presents to us other fields of inquiry, all connected ultimately with ^{Conclusion.} the same lofty realities. Into those fields the distinguished members of our Institute are not slow to enter. One who has lately been welcomed to our ranks has effectually strengthened us by his lectures against some sophistries of the time, which were listened to by crowds last year, and are supplemented by his frequent addresses in our Metropolitan

cathedral. These will, in due course, we believe, be published. We would specify the almost new sciences of Comparative philology and mythology, which must certainly oblige careful examination, tending ultimately toward the same grand theme of vital human interest. We would ask the attention of some of our members to H. Ewald's new book on *The Historical Succession of the Semitic Languages*, and to Renan's *Histoire Générale des Langues Sémitiques*, in connection, e.g., with the apparent statement of Scripture, that there was a time when "all the earth was of one language and one speech": because preposterous statements are made on this subject just now by the uninformed to the more uninformed. Great social questions are also stirring, and all will stand, of course, in some relation with the Christian Philosophy, which is really a "whole"—(as St. Irenæus says when speaking of the faith itself), and cannot be divided.

We begin our year with the consciousness that we have no light work before us; yet with thankfulness that we are permitted to join in vindicating that cause which is goodness and truth for ever. The example of the Prelate of this Christian diocese will not be lost on many who have hitherto stood aloof from us, not knowing that it is the "battle of the Lord against the mighty" which may at any moment have to be fought in this arena. All Englishmen, in a word, in these anxious days, who have any grasp of our Christian Philosophy, and love of our Christian ethics, and Christian laws, should be enrolled here. Great works of religious science and thought are waiting to be done, and who among us may not co-operate? None should fail us who own HIM, Who is the "Beginning and End, the First and Last," none who reverently feel in His presence, "all things come of Thee," or hear in the closing words of His Revelation the grand announcement of the Final Cause of all, "for THY pleasure they are, and were created."

THE LORD BISHOP OF GLOUCESTER AND BRISTOL.—My lord, ladies, and gentlemen: The very great honour has been committed to me of proposing the fourth resolution, in which I think all present will most heartily concur—"That the best thanks of the members and associates"—and I am sure, I, for one, must add of the visitors, in their name, if any others be present besides myself,—"be presented to the Rev. Dr. Irons for the annual"—I almost thought I read admirable, as it is (Cheers)—"for the annual address now delivered." I am sure, my friends, that my mis-reading, if it was such, would be the only appropriate description of the address we have just heard. For two hours Dr. Irons has engaged the attention of this large and intelligent audience. His address has been truly exhaustive, efficient, philosophic, calm,

poised, temperate throughout—one of those addresses that no one here can have heard without wishing that a great many more had the same privilege as ourselves. Of course it would be simply unreasonable, and indeed in many points impertinent in me, to call any attention to the contents of that very admirable address ; but I may, perhaps, be permitted to say that the concluding portion will be profitably read by very many. There are surely some here—I am one—who are acquainted with the whole system of reasoning of which Dr. Irons has been so able an exponent ; there are others, however, who will profitably read his address, and I must venture to say that the latter part particularly struck me as containing observations and thoughts and arguments which might well be used against thinkers of that school of which Mr. Darwin is a very able representative. Dr. Irons has made us all feel that though such attacks may be made against religion as to baffle many of us who are inexperienced, yet, if we fall back on certain leading principles and thoughts, we shall always find ourselves on very sure and safe ground. The able Doctor has pointed out, that, of such thinkers, we need only ask two or three homely questions, one of which Dr. Irons only approached lightly, though on the other two he dwelt with great force ; and having had the advantage of speaking with many scientific men in this metropolis, I say that where the facts are very striking we do not deny them, but I ask, Whence came language ? How did this arboreal animal shape its hirsute jaws, through any number of ages you please, so as to adapt words to thoughts and suitable acts ? I am told by competent persons, that the explanation of Mr. Darwin is most unsatisfactory. Then, as regards moral instincts, our lecturer has done admirable service in demolishing the theory put forward by this school. We may very seriously and gravely ask, Can we account for the noblest part of our being—that consciousness of right and wrong, that mystery that places us in many respects higher than the very angels round the throne of God—can that be accounted for on Darwin's principles, arguments, and facts ? Then we come to another point which I, as a stranger, may perhaps be permitted professionally to allude to—shortly, but very distinctly : I mean the sense of religion. Is it possible for any one of us to try and account for the sense of religion coming into our hearts ? Exalt morality as much as you please, but between morality and religion there is, and ever must be, the widest possible—I had almost said an impassable—barrier. Look up to the heavens and think, “There is God, the Father of all, who loves His creatures.” We know that we learnt that, in one sense, at our mother's knees ; but yet we derived it in a way that makes us feel we must have arrived at it ourselves, and for the truth of it we may appeal to the conscience of the wildest nations, who have their Great Spirit—the God and Father of all. I ask them, Whence came religion ? Whence did that supposed progenitor of our race get these ideas and thoughts ? How can we connect anything so vitalizing as religion with that fabled progenitor ? I believe that all such myths as those which Mr. Darwin has set up—I wish to speak very temperately—must fall completely to the ground. I have been tempted by the admirable paper which we have heard read to go far beyond what I intended when I rose ; but now

in conclusion, permit me to express, as a stranger, a single opinion. I came to your good honorary secretary to-day to ask a question which I now address to you all—How is it that you are not very much more popular? With the able selection of papers which I have read in the list that has been circulated among us, I cannot help asking how it is, when there are lecturers now occupying public attention in crowded halls in our metropolis—how is it that some of the many able lecturers of this metropolis are not found conducting or taking part in similar scenes? I seem to find myself answered; for I see it is stated as the fifth object of the VICTORIA INSTITUTE: “When subjects have been fully discussed, to make the results known by means of lectures of a more popular kind, to which ladies will be admissible, and to publish such lectures.” Well, I cannot help thinking that many of us strangers would much more largely rally round this Institute, if it was not only a repertory for these admirable addresses and able lectures, but if some of the competent members of it took their places with some of our present lecturers, and spread abroad some of the many telling facts connected with our Christian religion and Christian evidences, to the hundreds and thousands that would listen to them. I throw out this thought, and I am sure I ought to apologize for it; but if any of your working council should think it worthy of a passing notice, it will not then have been spoken wholly without profit. For myself, let me say there are many prelates who, to speak the plain truth, would gladly be put in connection with such a society as this, and who would give every assistance they could. (Cheers.) We cannot give you our money—it is better to speak the plain truth—I should like to be a vice-patron, but it would cost sixty guineas; but if persons could be taken as a sort of assistants, with no rights and no privileges, and receiving no papers unless they paid for them, but at liberty to give papers to you if you thought them worthy of a hearing, I think the VICTORIA INSTITUTE might become even more popular than it is.* But I have sermonized for myself; and if I have perhaps been, as I sometimes am, a little impertinent, let us forget my impertinence, and thank heartily our able lecturer. (Cheers.)

Admiral HALSTEAD.—My lords, ladies, and gentlemen: I have had the honour of being called upon to second this resolution, and I feel very great pleasure in being so selected. I am a very old member of this Institute, and I have never heard Dr. Irons without deriving great benefit. I am not a contributor to the discussions or to the papers, but am very grateful for being a member, and for all that I hear in the Institute, and will venture to say that every member will join with me in expressing our gratitude to Dr. Irons for the beautiful and touching and truthful way in which he has described the feelings of us all on the death of our founder, the very dear friend of so many of us, and of myself not least among the number. (Cheers.)

* Papers from such as may not be members or associates are admissible.—ED.

Dr. IRONS having testified his acknowledgments,

Rev. J. B. OWEN.—I have much pleasure in moving “That the thanks of this meeting be presented to the Earl of Shaftesbury for his occupancy of the chair on the present occasion.” We have heard a great deal to-night about the formation and nucleation of facts and inferences ; but we shall all agree on one point—that it would be a very difficult thing to formulate all the facts connected with the public services of our noble President. So long as his lordship continues to manifest the power and talent and fairness of thought which distinguish his orations in public, it will be difficult to get many people to believe that, after all, we are only descended from a jelly-fish. (Cheers.)

Mr. C. BROOKE.—I have much pleasure in seconding the motion.

The PRESIDENT.—My lord bishop, ladies, and gentlemen : Small thanks are due to me for my services this evening. The lecture we have heard to-night is one that I have derived much instruction from, and I have been delighted with the manner in which Dr. Irons has exposed the false philosophy of a book which I have had little time to study. But I confess that I am filled with astonishment and wonder how it is possible for any man whose mind is a treasury of thought and abstraction, to be so regardless of the great necessities of the human race surrounding him, as to devote a long life, day and night, to the simple and sole purpose of shutting us up to the startling conclusion that we are really descended from a monkey, and are in all probability returning to that state. Much of the power of such a man should have been devoted to the practical duties of life. If many of our abstract philosophers who are employed in this way, would address themselves to the pressing evils of the day, the great necessities of the seething populations of mankind would receive far more attention than they do at present. Let us have philosophy, and speculation, and high intellectual pursuits by all means ; but there are high practical dominating duties to be performed also, and of these duties Christianity is one. There is this simple lesson of which Dr. Watts reminds us all—that we must give a good account of every day that we have passed. (Cheers.)

The Meeting then terminated.

NOTE.—The papers read and discussed at the last Meetings of the session (namely those held on the 5th and 19th of June, 1871), were inserted in Vol. V., because they completed, so far as it was possible, an important inquiry begun in a paper contained in that volume.

ORDINARY MEETING, DECEMBER 4, 1871.

CHARLES BROOKE, ESQ., F.R.S., VICE-PRESIDENT, IN THE CHAIR.

The Minutes of the last Meeting were read and confirmed.

The following elections were announced :—

MEMBERS :—

His Grace the Archbishop of Canterbury, F.R.S., Lambeth Palace.
 The Right Rev. Bishop Trower, Ashington Rectory, Steyning.
 Major H. D. Broughton Smith, Sumbulpoor, Central Provinces, India
 (Life).
 The Very Rev. the Dean of Carlisle, the Deanery, Carlisle.
 A. C. P. Coote, Esq., A.B., Dungarvan House, Tunbridge Wells (Life).
 W. W. Fitzwilliam Dick, Esq., M.P., Humewood, Baltinglass.
 Rev. A. T. Edwards, M.A., St. Phillip's Rectory, Kensington.
 Rev. T. M. Gorman, B.A., 13, Campden Grove, Kensington.
 J. Houldsworth, Esq., 36, Queen's Gate.
 Rev. R. Phayre, M.A., West Raynham Rectory, Brandon.
 Rev. Aubrey C. Price, M.A., St. James's Vicarage, Clapham.
 Rev. J. A. Savile, M.A., Ardmere, Torquay.
 Rev. J. G. Wood, M.A., F.L.S., &c., 9, Erith Road, Belvidere.

ASSOCIATES :—

Rev. T. E. Franklyn, M.A., Christ Church Vicarage, Tunbridge Wells.
 G. Maberley, Esq., 46, Boundary Road, St. John's Wood.
 J. H. Nelson, Esq., Campden Place, Lewisham.
 Rev. P. Strutt, 9, Alma Square, St. John's Wood.
 Rev. H. S. Warleigh, M.A., Ashchurch Rectory, Tewkesbury.
 Rev. B. Whitelock, M.A., Groombridge, Tunbridge Wells.

Also, the presentation of the following works for the Library :—

- “Transactions of the Royal Society.” Vol. XIX. *From the Society.*
- “Transactions of the Royal Institution.” Parts 54 and 55.
From the Institution.
- “Transactions of the Royal United Service Institution.” Parts 63 to 65.
From the Institution.
- “Transactions of the Smithsonian Institution of Washington.”
From the Smithsonian Institution.
- “Report of the 3rd Session of the 41st Congress of the United States of America.” *Ditto.*
- “Appendix to Mr. Anderson’s Journey to Musada.” *Ditto.*
- “The Age of Man.” By the Rev. Professor Kirk.
From Dr. J. A. Fraser, I.G.H.
- “Aphasia.” By Dr. Bateman. *From the Author.*
- “Comparative Anatomy.” By Dr. W. M. Ord. *Ditto.*
- “The Dynamical Theory.” By R. F. Ritchie, Esq. (2 copies.) *Ditto.*
- “God’s Works and God’s Saints.” By the Rev. R. Thornton, D.D. *Ditto.*
- “Investigaciones Cientificos.” By Indalacio Lievano. (2 copies.) *Ditto.*
- “Keys to Spiritual Problems.” By the Rev. W. Baker, M.A. *Ditto.*
- “A Missionary Cruise in the Pacific.” By the Rev. S. J. Whitmee.
Ditto.
- “Our British Ancestors.” By the Rev. Canon Lysons. *Ditto.*
- “The Plan of Creation.” By A. Beardsley, Esq., M.D.
From Captain F. Petrie.
- “Species not Transmutable.” By C. R. Bree, Esq., M.D. *Ditto.*
- “The Staffordshire Coal Fields.” By Dr. Beckett. *Ditto.*
- “Science and Religion.” By the Rev. W. Baker, M.A. *From the Author.*
- “Thoughts on Life Science.” By the Rev. E. Thring, M.A. *Ditto.*
- “Truths *versus* Shadows.” By F. R. Waring, Esq., M.D., I.G.H.
Ditto.
- “Use of Revelation in Union with Science.” By the Rev. R. Phayre, M.A.
Ditto.

The following Paper was then read by the Author :—



Shrine of the great deity Amun-Ra, with the goddesses Mersokar and Eileithya in the form of snakes on either side of the door. Above are the solar disk and the usual cornice of everliving uræi. (Leyden Museum.)

*OBSERVATIONS ON THE SERPENT MYTHS OF
ANCIENT EGYPT.* Illustrated with Explanatory
Figures from Egyptian Monuments and Ancient Gems. By
W. R. COOPER, Esq., F.R.S.L., Secretary of the Society
of Biblical Archæology.*

WHILE much has been done for the elucidation of the Ophiolatry of India, Greece, and Rome by many most able scholars, yet the serpent myths of Egypt,—the oldest, most abundant, and best preserved of them all, have been but little attended to since the time of Champollion and Wilkinson. On the Continent it is true that MM. Pierret, Brugsch, and Lenormant† have published a few isolated papers upon parts of the legends of hieroglyphy, but these have never been translated into English, and even the originals are but little known. This is both a subject of regret and of surprise, for no one who considers the very early connection between Egypt and Israel in Biblical times can fail to have noticed that there were many allusions and restrictions in the ceremonial laws of the latter nation, which only by a reference to the customs of their contemporary neighbours could be duly understood. While the Romans doubted, and the Greeks ridiculed, their gods, the nobler and more primitive Egyptians loved, and were supposed to be beloved, by them. The profane and the impure divinities of the Grecian Olympus, the debaucheries of Silenus and of Pan, the fraudulent Mercury, and the unchaste Venus, find no counterpart in the Egyptian Pantheon. Not till the irruption of the semi-greek Psammetici does Theban worship become obscene, and Theban sculpture gratuitously indecent; and it may be safely asserted, without fear of contradiction, that there is, morally and scientifically, more to disgust in the *Odes* of Horace or *The Days and Weeks* of Hesiod, than in the whole vast range of ancient Egyptian literature.

* Those aware of some of the tendencies of modern thought will recognize the value of this paper. Since it was read the author has kindly taken the opportunity of adding such new matter as the most recent investigations on the subject afford, in order that it might be as complete a statement of the serpent myths of ancient Egypt as could be at present published. The engravings have been carefully done on the graphotype process by Mr. John Allen.—ED.

† Mostly in the *Revue Archéologique*, of Paris, and the *Zeitschrift für Ägyptische Sprache*, of Berlin. England as yet possesses no journal wholly devoted to exegetical archæology.

2. The danger of Egyptian theology was not in its innate impurity, but its extremely speculative character, its endless subtleties and misunderstood symbolisms, its fetish amulets, and degrading animal idolatry. In these it was, to a great extent, imitated by the Jews, whom, despite the precautions of the divine lawgiver, it corrupted, while by associating with the visible agencies of good and evil the ideas of invisible and supernatural power, the hieroglyphers, as more or less all symbolists eventually do, obscured the antitypes they intended to typify, and overloaded their imperfectly significant faith by a still less significant system of representation. These errors the pride and subtlety of the hierarchy permitted the common orders to fall into by the division of their dogmatic teaching into an exoteric, and esoteric, meaning,—one for the people and another for themselves,—and then, after a time, avarice and statecraft usurping the place of principle, the bulk of the Egyptians were left to follow their own interpretations of their symbolic statuary, while the secret beauty of the Theoretic faith was reserved for the hierophants alone.

3. Foremost among all the natural objects first associated as representatives, and then as hypostases, of the Deity, were the sun and the heavenly bodies; the sun as Chefer- and Horus-Ra (fig. 1), the moon as Isis, the heavens as Neith; and upon earth

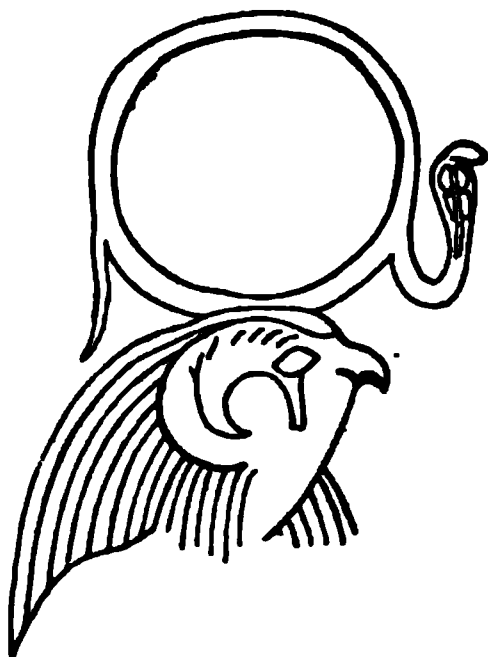


Fig. 1. Horus-Ra, wearing the solar disk and uræus. (Arundale.)

the benevolent and fertilizing Nile as the deity Hapimou, or a form of Khem, father of the land of Egypt. The sanctification of beasts, birds, and reptiles followed—some for their beauty, others for their utility; then a spirit of fear led on the way to the propitiation of destructive agencies and injurious animals—the storm, the east wind, the lightning, in the first class, and the hippopotamus, the crocodile, and the SÉRPENT, in the other,—till, in the end, after centuries of superstition and de-

cadence, the adoration, vocative and precativè, of this latter reptile spread throughout the whole of the Egyptian mythology, and the serpent lay enshrined in the temples of the oldest and most beneficent divinities.

4. From the very earliest period to which our researches are enabled to extend, there is written and monumental evidence that out of three kinds of serpents, known in Egypt and represented on the monuments, *two* were the objects of a peculiar veneration and of an almost universal worship. Unlike the adoration of Seb (fig. 2), the crocodile deity of Ombos and

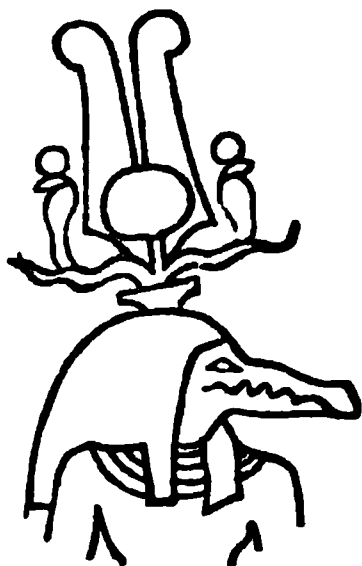


Fig. 2. The deity Sebek wearing the Teshir or great plume of Osiris. (Bunsen.)

Tentyra,* and the batrochocephalan deity, Pthah, the frog-headed fire-god of Memphis in the Delta, the reverence paid to the snake was not merely local or even limited to one period of history, but it prevailed alike in every district of the Pharian empire, and has left its indelible impress upon the architecture and the archæology of both Upper and Lower Egypt.

5. The three serpents peculiar then to Egypt and North Africa appear to have been: 1. The Naja, or Cobra di Capello, the

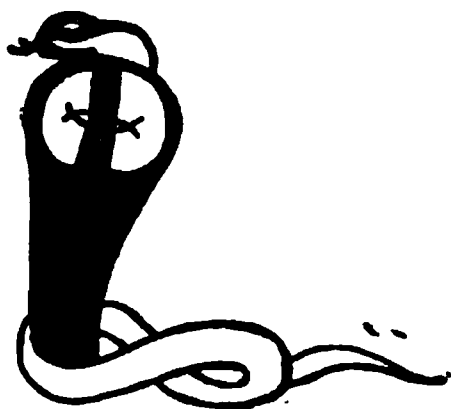


Fig. 3. The Sacred Uræus or Basilisk. (Sar. Oimen.)

spectacle-snake of the Portuguese and the Uræus† (fig. 3) and basilisk of the Greeks; a venomous and magnificent reptile, with

* Champollion (le Jeune), *Panthéon Égyptien*.

† Uræus, Gr. = Ouro = arau, in hieroglyphics, the letters composing the determinative of king.

prominent eyes, ringed skin, and inflated breast. From its dangerous beauty, and in consequence of ancient tradition asserting it to have been spontaneously produced by the rays of the sun,*

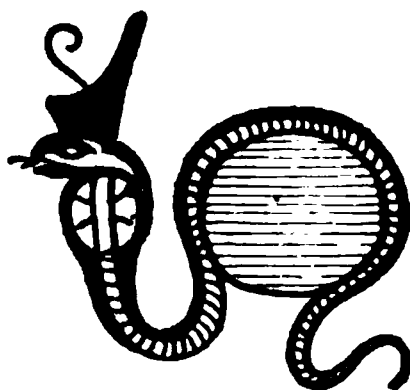


Fig. 4. The solar disk encircled by an uræus wearing the Pschent.

this creature was universally assumed as the emblem of divine and sacro-regal sovereignty.† 2. The Asp, or Cerastes (fig. 5),



Fig. 5. The Cerastes. (Bonomi, *Hieroglyphics*.)

a small and deadly kind of viper, possibly the cockatrice of Holy Writ,‡ remarkable for its short thick body, and blunt and flat-topped head, crested with scaly horns. 3. A large and unidentified species of coluber, of great strength and hideous longitude.

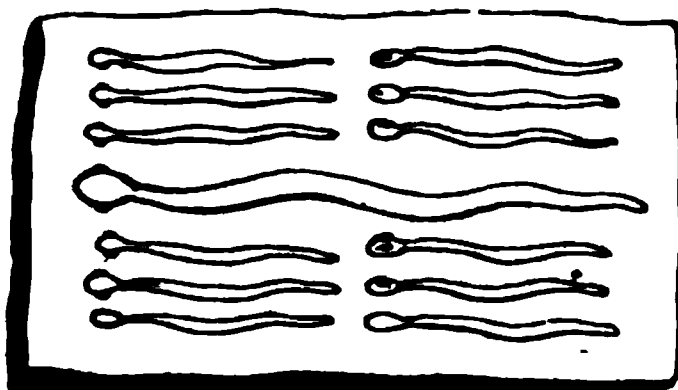


Fig. 6. Limestone tablet in the British Museum, possibly representing the generation of the months.

This last was, even from the earliest ages, associated as the representative of spiritual, and occasionally physical evil, and

* Hence the reptile is termed, on an ancient papyrus, "Soul of the body of Ra."

† The King or Pharaoh is hieroglyphically represented by a basilisk (uræus) encircling the solar orb alone, as on the great gates of El-Luxor. (Fig. 4.)

Deane, an unsafe authority, asserts that death by the sting of an uræus was supposed to insure an immortal life to the victim; hence the peculiar fitness of the death of Cleopatra.

‡ There is a curious block at the British Museum, representing one large viper (distinguished from those commonly drawn by an extremely large head) between twelve smaller ones. The reptile is wrought in soft stone, of ancient Egyptian work, and is unintelligible as to the mythos represented, there being no hieroglyphics. (Fig. 6.)

was named Hof, Rehof, or Apophis (fig. 7), "the *destroyer*, the *enemy of the gods*,* and the *devourer of the souls of men*." That such a creature once inhabited the Libyan desert, we have the

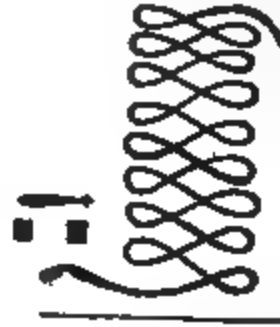


Fig. 7. Apophis, the destroyer. The hieroglyphics above his head compose the letters of his name, A - P - P.

testimony both of Hanno the Carthaginian† and Lucan the Roman;‡ and if it is now no longer an inhabitant of that region, it is probably owing to the advance of civilization having driven it further south.

6. With one or other of these snakes all the ideographic theology of Egypt is involved. Does the king desire to

Fig. 8. Thothmes III. wearing the sacred crown of Oairis; beneath it, and above the cleft or plaited head-dress, is fixed the jewelled uræus.

declare his divine authority, he assumes the sacred asp of Amun-Ra (fig. 8), and wears the basilisk upon his crown. The

* From Hof or Hf is derived the Coptic name of a snake to this day.

† See *Periplus*, Cory's translation.

‡ First of those plagues the drowsy asp appeared, (Cerastes.)
Then first her crest and swelling neck she reared;
A larger drop of black congealing blood
Distinguished her amidst the deadly brood;
Of all the serpent race are none so fell,
None with so many deaths such plenteous venoms swell. . . .
Her scaly fold th' Hæmorrhoids unbends, (Apophis?)

priests of the Temple of Ra at Heliopolis, and the priestesses of Isis at Alexandria,* carried serpents in their hands or in Canephora

Fig. 9. The basket of the Eleusinian Canephora, containing a serpent, from whence the basket of Jupiter Serapis was derived. From a Greek coin. (Sharpe.)

phora on their heads (fig. 9) to declare their divine ordination (fig. 10). Hence also, the secret adyta, or sacristies of the divini-

Fig. 10. Egyptian priestesses carrying the uræus. From a Ptolemaic slab engraved in Bartoli's *Admiranda*.

ties, and the sculptured arks, with the massive shrines, great

And her vast length along the sand extends ;
 Where'er she wounds, from every part the blood
 Gushes resistless in a crimson flood.
 The Basilisk, with dreadful hissings heard, (Uræus.)
 And from afar by every serpent feared,
 To distance drives the vulgar, and remains
 The lonely monarch of the desert plains.

Lucan, *Pharsalia*, lib. ix. 1200-30, Rowe's Translation

* Sometimes the Pschent, or Royal crown, was decorated by a cresting of pendent uræi similar to the usual ornamentation of a shrine. See Lepsius, *Abth.* iii. Bl. 294.

sacred triads, were crested with a cornice of jewelled snakes (fig. 11). As the emblem of divine goodness, the crowned Uræus, resting upon a staff, was one of the most usual of the

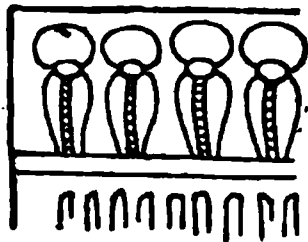


Fig. 11. Upper portion of snake-crested cornice from intercolumnar slabs. (Philæ.)

Egyptian standards, and the serpent upon a pole, which Moses, by divine direction, upheld to the Israelites in the wilderness (fig. 12),* has been supposed to have been either

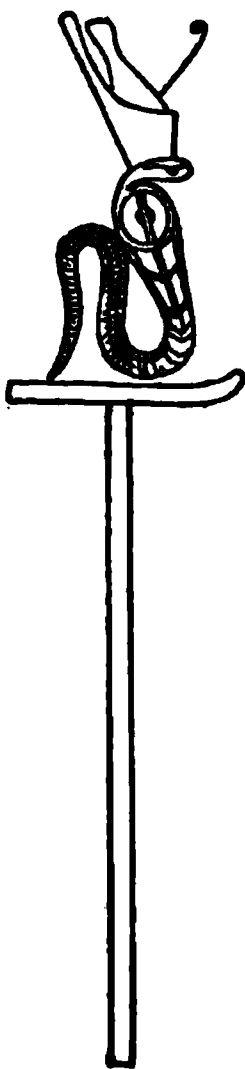


Fig. 12. An Egyptian standard, bearing a bronze figure of the goddess Ranno. (Sharpe.)

an adaptation, or imitation, of the well-known pagan symbol. † Again, when once the Uræus had been associated with the idea of divinity, the Theban priests, rightly desiring to ascribe the gift of life and the power of healing to the Deity

* Numbers xxi. 9.

† Sharpe, *Bible Texts*, p. 47.

alone, significantly enough twined the serpent around the trident of Jupiter Ammon (fig. 13), and the staff of Thoth,

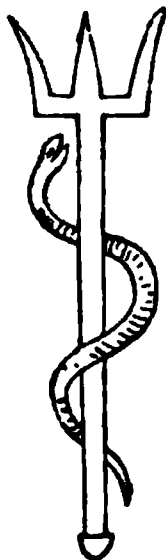


Fig. 13. Trident and serpent of Jupiter Ammon. From a gem. (Maffei.)

or Hermes Trismegistus (fig. 14),* the author of medicine, to imply the source from which that subordinate demigod's virtues

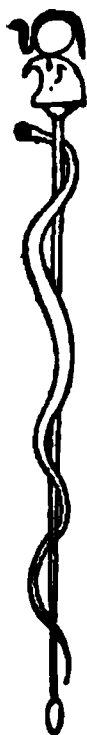


Fig. 14. Staff of Hermes ; on the top is the mystic hawk of Horus-Ra, and the solar uræus. (Wilkinson.)

were derived.† From this, in the later periods of her history,

* Wilkinson, *Ancient Egyptians*, vol. v. p. 12, plate 46 ; and vol. iv. p. 183.

† The older Italian antiquaries, whose treatises are as comprehensive in detail, as they are excellent in composition, have written much of this and cognate mythological analogies ; as, for example, Cartari, Vincenzo, *Le Immagini dei Dei de gli Antichi*, 1581 ; Orlandi, Orazio, *Osservazioni : il Serpente di Bronzo*, 1773 ; Agostini, Lionardo, *Le Gemme Antiche*, 1657. All these are in the library of the Soane Museum, the curator of which affords every facility for their inspection.

Egypt remitted to Greece, along with the so-called forty-six hermetic treatises, the traditional caduceus, or serpent sceptre

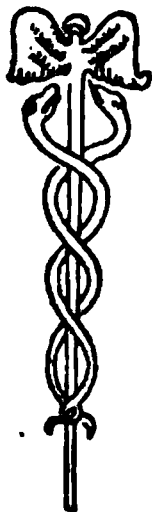


Fig. 15. The Caduceus or serpent-staff of Mercury.

of Cyllenius (fig. 15) and Æsculapius (fig. 16),* and by a sub-



Fig. 16. Staff or club of Æsculapius, the god of medicine. (From Maffei.)

sequent transformation of the same deities into a feminine

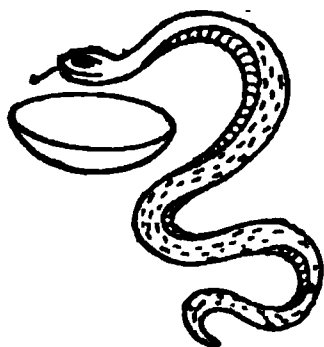


Fig. 17. The serpent and bowl of the goddess Hygieia.

form, the snake and bowl of Hygieia (fig. 17), the goddess of

* On the side of the rock grotto of Trophonios were sculptured images of Trophonios and Herkyna with serpent-twined staves. — Raol Rochette, *Monumenti inediti*, pp. 21, 22.

health.* Following out the same symbolic teaching, to imply the swiftness and extent of the divine attributes, the serpent

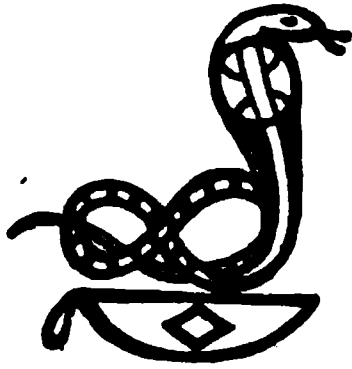


Fig. 18. The serpent and dish of the goddess Maut, the great mother.

of good is often invested with wings; not that such creatures ever existed, but to identify the active and passive properties of the divine essence in *one* impersonation.† Instances also occur, as on the sarcophagus in the Soane Museum,‡ where four

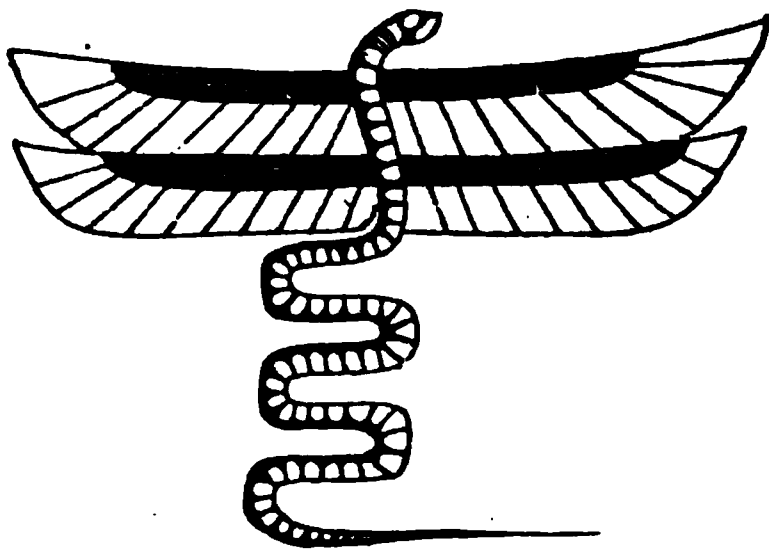


Fig. 19. Four-winged serpent, Chauphis or Bait.

wings are attached to the divine reptile (fig. 19), that “the four corners of the earth,” a completely Egyptian mode of expression, might be represented as being embraced by and sheltered by the Supreme Providence, while in another instance the solar disk is crested with four serpents (fig. 20), the Uræi of goodness, embodying the same metaphorical allusion.

* See Maffei, Alessandro, *Gemme Antiche figurate*, 1707, plates 55 and 57.

The serpent and bowl are doubtless derived from the hieroglyphical characters for Maut, the mother goddess, these being a serpent upon a shallow bowl, which the Greeks, not reading as the hieroglyphical signs for “Lady Mother,” modified into mere ornamental attributes.

† Such serpents occur on the sarcophagi of Pepar, XXX. Dyn., in the British Museum, and papyri of Petuk Hans, Hesi Hem-Kebi, XXI. Dyn., and Amen-Shau, XXVI. Dyn.

‡ That of Qimeneptheh I.

Snakes guarded the gates of the eternal region; and snakes were worshipped while living, in the temple of Khonso at

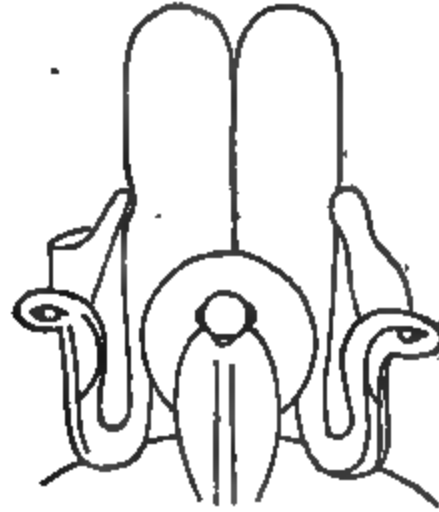


Fig. 20. Plume of Amun-Ra, and solar disk, with four uræi. (Leyden Museum.)

Napata, and mummied when dead in the temple of Kneph



Fig. 21. Head of the ram-headed god Chnum, the spiritual generator, bearing the feminine ursus of Ranno.

or Chnouphis, the spirit or soul (fig. 21) of the world. The

Fig. 22. The symbolic winged serpent of the goddess Mersokar, or Melsokar, wearing the crowns of the upper and lower kingdoms. (Wilkinson.)

guardian genii of Upper and Lower Egypt, Melsokar (fig. 22) and Eilethya (fig. 23),* were honoured under the guise of uræi;

* Wilkinson, *Ancient Egyptians*, vol. v. plate 52.

and the avenging Caberei (fig. 24),* or torturers of the wicked

Fig. 23. The symbolic winged serpent of the goddess Eileithya, wearing the crown of the lower kingdom.

in the Egyptian purgatory, inflicted the fellest punishment upon the condemned, by scourging them with whips of living



Fig. 24. The avenging Caberei, the tormentors of the dead. At the left hand is the Pylon or entrance to hell, guarded by two Cynocephali, the emblematic monkeys of Truth and Justice. (Sharpe.)

snakes, or thrusting them, in company with ferocious vipers,



Fig. 25. The goddess Chian, Venus. From a stelè in the British Museum. (Sharpe.)

into a lake or tank of fire.† The goddess Remphan (fig. 25)

* Caberei, from *ꜥꜣꜣ*. Children of Pthah Typhon and his hideous consort Thoeris, the source of the Hellene Eumenides.

† A common representation, which occurs on the outside of several wooden sarcophagi in the British Museum, as No. 38, Upper Egyptian room.

and the younger Horus, to declare their power over life and death, hold snakes in one hand and flowers in the other, offering the symbols of beauty and health to the Egyptians, and threatening the Syrians on the left hand with the envenomed creatures of death.* The Greeks, who, two thousand years later, introduced all these theories into their own mythology, and interpreted the sacred figures of the Egyptians by their own less esoteric cultus, have, through the mistakes of their philosophers, greatly obscured the real symbolism of the ophiolatry of Egypt; and those who would unravel the mysteries of Alexandrian and Theban faith, must begin by disregarding the Olympian Pantheon, and forgetting the perversions of Roman ignorance and Plinian supercilious incredulity.

7. Further, be it remembered, the Egyptian reverence, both in fear and love, of the serpent, was contemporaneous with the lives of the oldest Biblical patriarchs; and to one who is unable or *unwilling* to accept the sacred chronicles and the antiquity of their earliest chapters, it is exceedingly difficult to

Fig. 26. Krishna entangled in the folds of the great serpent Calya, who is biting his heel; the incarnate deity is waiting for divine assistance from Indra to enable him to overcome the enemy.

account for the prevalence of a serpent myth, not only in Egypt, but in Assyria, Etruria, and Hindustan;† still more difficult is it for such a one to explain the extraordinarily

* Sharpe, *Egyptian Monuments in the British Museum*, p. 70.

† As in the myths of Ramayana and Krishna, and the serpent Caliya. For an exhaustive treatise on Indian ophiolatry, see Fergusson's *Tree and Serpent Worship*.

close analogies existing between the very words in which the serpent is described, and the acts in which he is represented as officiating, and those titles and deeds by which the

Fig. 27.* Krishna triumphant over Kaliya ; with both his hands the deity grips the folds of the hated monster, and crushes its head beneath his feet. (Conf. Gen. iii. 15.)

ancient serpent is painfully familiar to us all in the Mosaic record. A Greco-Egyptian writer of the Ptolemaic period, Horapollo,† does, indeed, assign a motive for the superstition ; and his language is sufficiently curious to excuse our quoting it accordingly ; and here is also the best place wherein to interpolate a few other extracts whose novelty will at least excuse their introduction, though it will be obvious that, from a purely philosophical point of view, the explanation they afford of the serpent-worship of Egypt is unsatisfactory in the extreme.

“When they would represent the universe they delineate a serpent with variegated scales, devouring its own tail ; by the scales intimating the stars in the universe. The animal is also extremely heavy, as is the earth, and extremely slippery, like the water ; moreover it every year puts off its old age with its skin, as in the universe the annual period effects a corresponding change, and becomes renovated. And the making use of its own

* This and the preceeding figure are from drawings supplied by William Simpson, Esq.

† Horapollo, lib. i. cap. ii.

body for food implies that all things whatsoever that are generated by Divine Providence in the world undergo a corruption into it again."*



Fig. 28. The Orphic egg, symbolizing inert matter vivified by the demiurge. (Bryant.)†

This relates to the coluber or serpent called Bait, "soul of the world," alone. According to Champollion, the emblem of



Fig. 29. The serpent Chnuphis. From a Gnostic gem. (Montfaucon.) The name inside the circle is that of the Archangel Michael.

the Creative power of the Deity (fig. 29) under the form of the god Chnuphis (fig. 30), a deity identified with Jehovah Sabaw

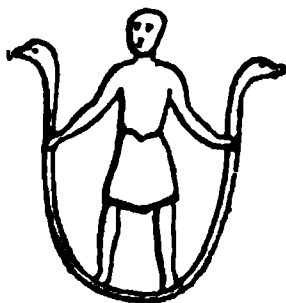


Fig. 30. The deity Chnuphis, as a double-headed serpent. (Champollion, *Pantheon Egyptien*.)

($\text{IA}\Omega \Sigma\text{ABA}\Omega$)‡ (fig. 31) by the Gnostic heretics of the second century.§

* Hence the well-known symbol of a serpent entwined round an egg, used by the Orphic mystics to signify matter vivified by spirit.

† For further details of the great Egyptian Orphic myth which evolved creation out of the cosmic egg, which breaking, the upper half became heaven and the lower earth, see Creuzer's *Symbolik*, ii. 224, and iv. 83-5.

‡ צבאות (Tsebaoth), "Lord of Hosts."—S. Drach.

§ See Montfaucon, art. "Gnostiques"; *Abraxas*, tom. ii. part 2.

"When they would represent eternity differently, they delineate a serpent with its tail covered by the rest of its body, and they place golden figures of it round the gods.* The Egyptians say that eternity is represented by this

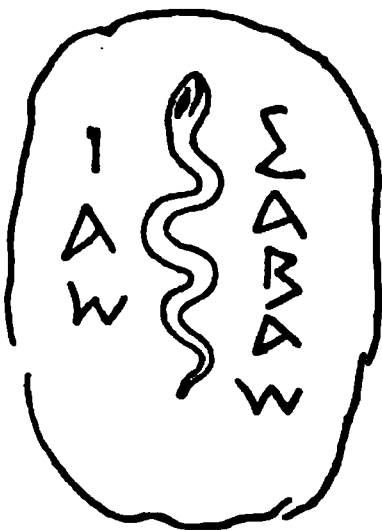


Fig. 31. The symbolic serpent of the deity IAΩ. (Drawn from memory.)

animal because of the three existing species of serpents; the others are mortal, but this alone is immortal, and because it destroys any other animal by merely breathing upon it, even without biting. And hence, as it appears to have the power of life and death, they place it upon the heads of the gods."†

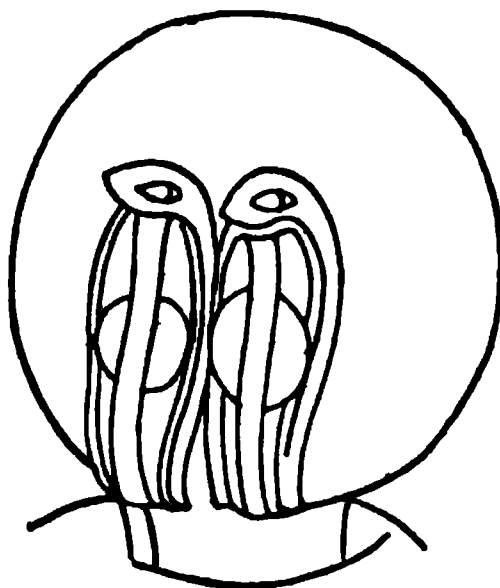


Fig. 32. Solar disk and double uræi. (Leemans.)

This evidently refers to the uræus only, who is frequently represented as guarding the sacred cypress groves of the Amenti (Sheol) by breathing out fire to destroy any invading or unjustified soul ‡ (fig. 33). Hence arose the origin of the

* On the front of the head-dresses peculiar to divinities and kings.

† Horapollo, lib. i. cap. i. A curious example of the manner in which a symbol is exaggerated when its significance is misunderstood or forgotten, is afforded by a Romano- or Greco-Egyptian statue of a king wearing the great crown of Amun-Ra, the supreme divinity, with *two* uræi instead of one, on the solar disk; ridiculously intended by the sculptor as a *double* compliment to the monarch.—See *Musée de Leide*, part i. plate 1.

‡ Uræus = ⲙⲓⲁ light — burning furnace.—S. Drach.

Grecian myth of the Hesperidean garden and the *fire-breathing* dragons which guarded it (fig. 34). With respect to the uræus,

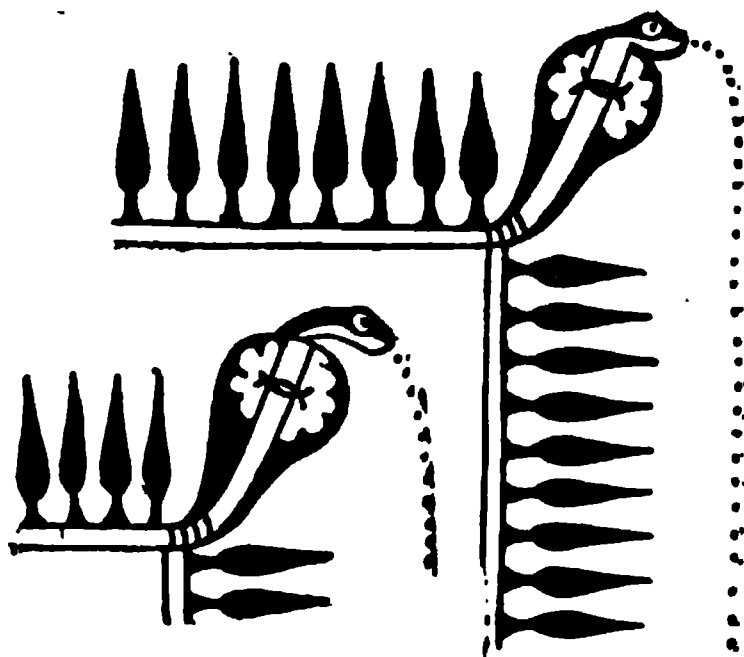


Fig. 33. The corners of Paradise guarded by fire-breathing uræi; further on, but not shown in the plate, are the bodies of the just awaiting in the cypress shades their ultimate revivification. (Sar. Oimen.)

one circumstance deserves notice; it is always represented in the feminine form, and is used as a symbol of fecundity. Hence

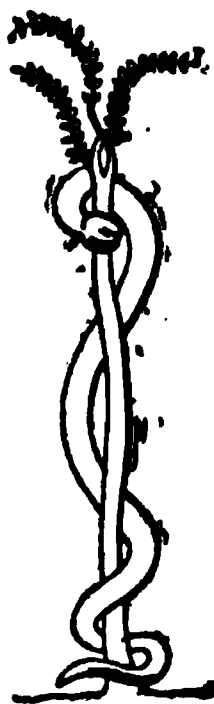


Fig. 34. The serpent guarding the apple-tree of the Hesperides. From a Greek vase in the British Museum. (Sharpe.)

all the goddesses of Egypt were adorned with, and represented by, uræi; and not unfrequently the snake is alone figured, with the name of the goddess written in hieroglyphics above (fig. 35). This is notably the case in the tablets from the Belmore collection in the British Museum (see *infra*, §11, first moiety), and

on the sarcophagus of Hapimen, a great functionary of the nineteenth dynasty, and on that of Oimenepthah I., a monarch of the same period. (Fig. 36.)

"To represent the mouth they depict a serpent, because the serpent is powerful in no other of its members except the mouth alone." *

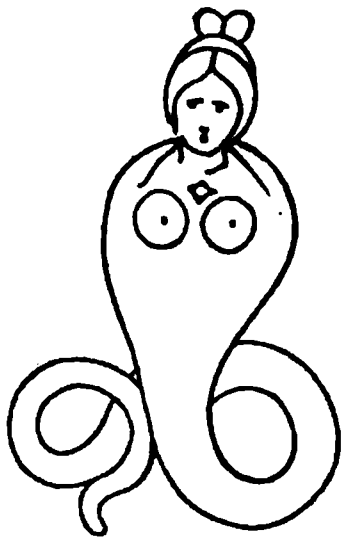


Fig. 35. Jewel in bronze, representing the serpent of goodness, or the goddess Ranno, Greco-Egyptian period. (From the original in the Hay collection.) Exact size.

This latter assertion is not borne out by the hieroglyphics, where the serpent uræust† is simply the phonetic of the letter *g*, and the asp, or coluber, of the letter *f*, or a sound analo-

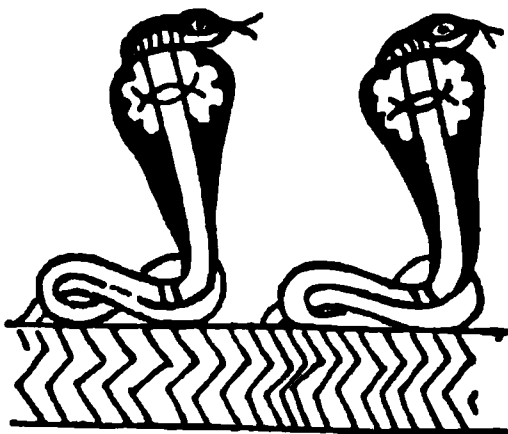


Fig. 36. The goddesses of Heaven as uræi resting by the side of the river of Amenti. (Sar. Oimen.)

gous to the Greek ϕ alone. Possibly it was an error for the name of another snake, Ru, which is the determinative ideograph for mouth.‡ This identification of Pharaoh with the serpent of goodness§ gives a wonderful significance to the bitter apostrophe of the Jewish prophet, who from the river of Chebar, foreseeing the final subjection of the Egyptian empire by the Chaldeans, terms the sovereign of Thebes "the great

* Horapollo, lib. i. cap. 45. † S. Drach. ‡ Bunsen, vol. i. p. 545, note.

§ The first king of Abyssinia is traditionally said to have been a serpent. Is this a misunderstood myth derived also from Egypt, whose kings, under the nineteenth dynasty, invaded, if they did not conquer, Abyssinia?

serpent in the waters," as it were denouncing *him* as the serpent Apophis, the enemy and destroyer of his country by his fierce opposition to that god, by whose right hand he, like Apophis, should be overthrown. "Son of man," says the divine afflatus to Ezekiel, "set thy face against Pharaoh, king of Egypt, and prophesy against him, and against all Egypt. Speak, and say, Thus saith the Lord God: Behold, I am against thee, Pharaoh, king of Egypt, the great dragon that lieth in the midst of his rivers, which hath said, My river is mine own, and I have made it for myself. . . . I will have thee thrown into the wilderness . . . thou shalt fall upon the open fields, and all the inhabitants of Egypt shall know that I am the Lord."—Ezek. xxix. 3—6. Cf. also Isaiah li. 9, and xxvii. 1, where the same reference to the Apophic myth runs throughout. (Fig. 37.)

Fig. 37. Apophis in the mystic celestial ocean between the goddesses Isis and Nephtys. (Sar. Oimen.)

8. The uræus is also the ideograph of the word "immortal"; whence the phrase, "the living years of the uræus," as applied to the immortality of the king. (Fig. 38.)

Fig. 38. A Greek coin, representing Ptolemy with the attributes of the Grecian Herakles, and the sacred snakes of the Egyptian Amun Ra. (Sharpe, Lee collection.)

"The asp is worshipped on account of a certain resemblance between it and the operations of the Divine Power, and being in no fear of old age, and moving with great facility, though it does not seem to enjoy the proper organs for motion, it is looked upon as a proper symbol of the stars." *

* Plutarch, *De Iside et Osiride*, § 74.

"In the vicinity of Thebes there are also sacred serpents not at all troublesome to men; they are very small, but have two horns on the top of the head. When they die, they are buried in the temple of Jupiter, to whom they are said to belong." *

This corresponds in some degree to a statement by the famous Principal of the Medical College at Cairo, M. Clot Bey, who asserts † that the uræus, or cobra, is *not* poisonous. Unfortunately the passage from Herodotus implies not the Naja, or Nasha, but the Cerastes, or two-horned viper. The temple of Jupiter is of course that of the god Chefer-Ra, who held a position in some respects analogous to that of Jupiter with the Romans or Zeus among the Greeks.

Cite we yet a further passage, and this time it shall be one from the Great Ritual of the Dead itself. It is the apostrophe to the serpent Bata in "Heaven, where the sun is." (Fig. 39.)

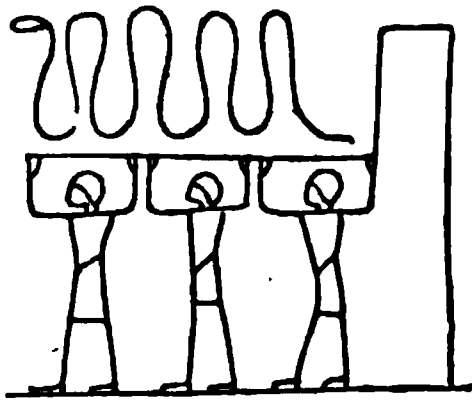


Fig. 39. The serpent Sati, or Bata, on the High Hill of Heaven. (Ritual, cap. cxlix.)

"Say, thou who hast gone, O serpent of millions of years, millions of years in length, in the quarter of the region of the great winds, the pool of millions of years; all the other gods return to all places, stretching to where is the road belonging to him? (i. e. who can measure the length of his infinity of years). Millions of years are following to him. The road is of fire, they whirl in fire behind him." (Celestial, not infernal, fire is here to be understood.) ‡

This symbolic creature may be the serpent alluded to by Job, when, in special reference to the works of God in the heavens, he declares, By his spirit he garnished the heavens. His head wounded the crooked (cowardly§) serpent.—Job xxvi. 13. (Figs. 40, 41.)

* Herodotus, *Euterpe*, 74.

† Bonomi, *Catalogue of Antiquities, Hartwell House*, p. 22, No. 171.

‡ Chap. cxxxi.

§ Sharpe's translation. נחש ברח Query, "gliding or barred serpent."—S. Drach.

From a misconception or mistranslation of this chapter, it is probable that Horapollon derived his confused account of the

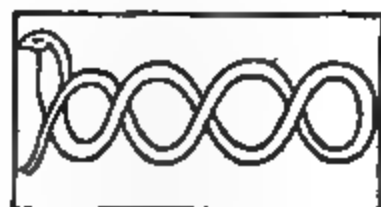


Fig. 40. The constellation Hydra. From the Zodiac of Denderah. Romano-Egyptian period. (Denon.)

serpent myths. Between the Egyptians and the Greeks there was little in common, and the priests purposely misled their Grecian querists, whom indeed they designated and treated as children.*



Fig. 41. The same constellation. From the Zodiac of Ensis. A little earlier period. (Denon.)

9. As, in the order of Providence, good always precedes evil, we will so far digress from the main purport of this paper, the Myth of Apophis, "the Destroyer," as to dwell for a few paragraphs upon the uræus of immortal divinity, and the Egyptian goddesses symbolized by it. (Fig. 42.)

Fig. 42. The goddess Pasht, or Buto, holding in one hand the Cucufa staff and in the other a feminine uræus. (Sar. Omen.)

10. The feminine deities were more numerous, and their character and offices were less distinctive than the male divinities. Each and all of them are written hieroglyphically by an uræus alone, sometimes with the ordinary proper name affixed;

* The reply of the Egyptian priest to Solon the Athenian is almost proverbial :—" You Greeks are children."

sometimes with the epithets "living, sparkling, shining, or immortal" (fig. 43); and sometimes, and far more frequently



Fig. 43. One of a series of goddesses adoring Amun Ra, and holding stars as offerings. (Har. Oimen.)

also, with a mystical compound name, the exact significance of which is not capable of literal interpretation. Often as the feminine spiritual principle, the goddess, as a serpent, twines



Fig. 44. The god Khonso in a shrine; at his feet is the serpent Ranno. (Har. Oimen.)

round, reclines beneath, or over-canopies one of the greater male divinities (fig. 44),* or with rising crest and inflated

Fig. 45. The god Knuphis, or Chnum, the spirit, in a shrine on the boat of the sun, canopied by the goddess Ranno, who is also represented as facing him inside the shrine. (Har. Oimen.)

* Belmore Collection, plate 18. See also triple mummy-case of Aero Ai, plate 1, -" Nuni in the sacred barge protected and canopied by Renno or Isis."

hood, protects her protégé with her terrible fangs (fig. 45). The generative power of the solar beams is always typified

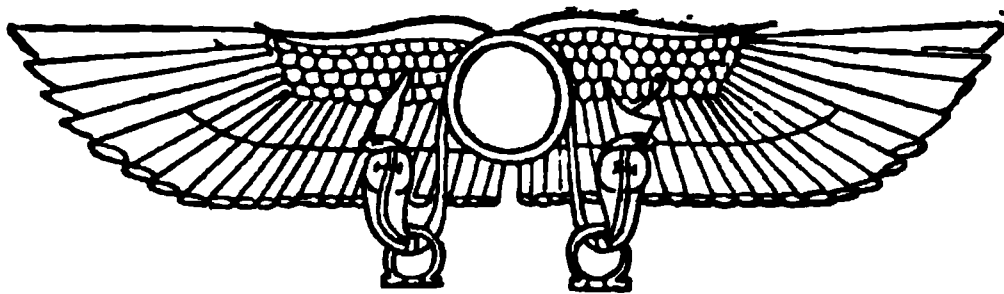


Fig. 46. The winged sun of Thebes. From the great Pylons at El Luxor. (Bonomi.) In this instance the signet of authority is suspended by the serpents in lieu of the usual Tau cross.

by pendent uræi (fig. 46),* which latter have generally the

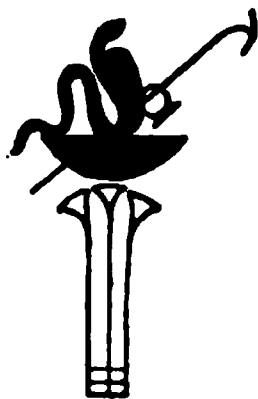


Fig. 47. The bowl and snake of the goddess Mersokar; beneath is the lily of the upper country. (Wilkinson.)

crowns of Upper and Lower Egypt, representing the goddesses Melsokar (fig. 47) and Eileithya (fig. 48) respectively.†



Fig. 48. The bowl and snake of the goddess Eileithya; beneath is the papyrus of the lower kingdom. (Wilkinson.)

Often a goddess, incarnated in a serpent, rests in a shrine or sits upon a throne to receive the worship of her votary.‡

* Wilkinson, *Ancient Egyptians*, vol. i. p. 239, second series.

† *Ancient Egyptians*, vol. v. p. 45.

‡ As in an unique example of the Ptolemaic period in the British Museum, which represents a quadrangular shrine, at the door of which a sitting uræus is sculptured. The cornice is terminated by a pyramidion, and the whole is executed in soft limestone. A nearly, but not quite, similar shrine, is figured in *Musée de Leide*, vol. i. plate 35.

Fruit, bread, flowers, and incense are the gifts most usually presented, human beings and animals, never.* The goddesses

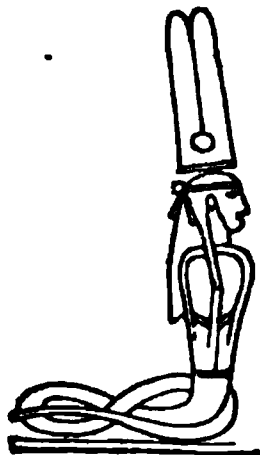


Fig. 49. The sacred uræus of goodness, or the goddess Ranno, wearing the symbolical crown of Amun-Ra. (Sharpe.)

whose cultus has left the most positive traces of its extent, are Melsokar or Mersokcar, the patron of Lower Egypt; Renno

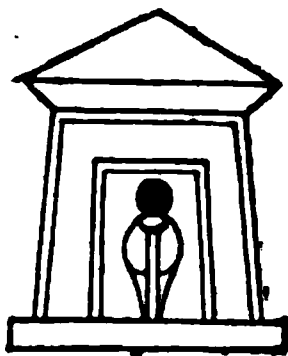


Fig. 50. Shrine, with the sacred uræus. (From memory.)

(fig. 49),† the mother of gestation, and goddess of harvest; and Urhuk, one of the doorkeepers of Sheol or Amenti. Of all

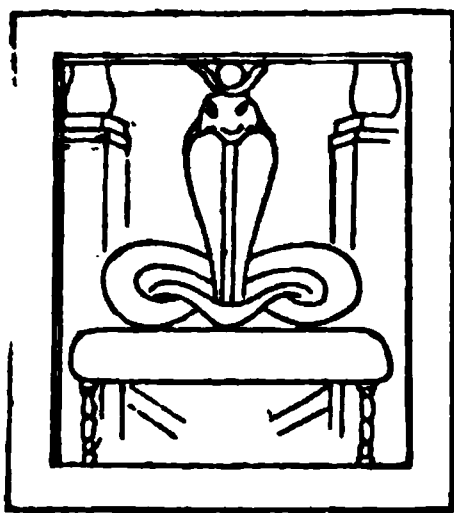


Fig. 51. Shrine, with the sacred uræus. On either side are columns bearing a vase of oil and honey for the food of the reptile. (Leemans.)

these statements; the incised and painted tablets and papyri in the British Museum afford ample evidence; and some of these,

* Contrary in this respect to the serpent "Fire-face." See *infra*, fig. 100.

† Curiously enough, the Hebrew word for green vegetation, רֶעֶנָּה (Cant. i. 15) strongly resembles that of this goddess. May the word have an Egyptian origin?

and notably so those in the Belmore collection, we will now proceed to describe.

11. On four of these monuments the adoration of one, who, in addition to her other offices, was the patron deity of nurses, women, and children, the goddess Ranno, is represented. In each case the offerings are precisely similar, and consist of flowers, fruit, and cakes. In No. 56, which is unfortunately broken, a Nubian gentleman,* kneeling on one knee, presents the divinity with lotus-flowers and

Fig. 52. Sepulchral tablet in the Belmore collection, representing the worship of the goddess Ranno. (British Museum.)

ornamental leaves, and offers for her acceptance a kind of *wave offering*.† Ranno (fig. 52) is drawn as crawling on the ground before the suppliant; and the serpent's scaly crest is sur-



Fig. 53. Sepulchral tablet as above. (Same collection.)

mounted by a placid human head,‡ adorned with a splendid askh or collar.§ In fig. 53 || the same subject is again re-

* Belmore Collection, plate 8.

† The wave offering of the Jews seems to have been borrowed from Egypt, as it was a purely Egyptian custom, it consisted of waving before the deity a small metal stand, containing vegetables and flowers.

‡ Belmore Collection, plate 8.

§ For an example of this characteristic decoration, see the mummies in the Upper Egyptian Saloon, British Museum.

|| Belmore Collection, plate 12.

peated, differing only in this respect, that no votivare presented, and the goddess, entirely serpentine, is resting on the outside



Fig. 54. Another, ditto ditto. These three tablets are fully described in the text.

of the shrine or pylon. In fig. 54* Ranno is represented as a female figure, only so far ophite as to have a serpent's head. She is seated upon the ordinary throne of the gods, and in her right hand holds the peculiar cucufa staff, used by the male deities alone (the proper sceptre of the goddesses being a papyrus stem in blossom, with which they are usually represented); † the left hand of the deity appears to have been intended to clasp the ankh or cross of life.‡ A priest kneeling before the great goddess, shields his face with his hands while supplicating her favour. In fig. 55 § the subject represented is purely mythical, and forms part of the vignette to a funeral stelé.

Fig. 55. The god Chnum overcanopied by the goddess Ranno. (Same collection.)

This picture contains the Deity Chnuphis (fig. 55), or Kneph-Ra, the creating agency, || in the form of a ram-headed man, sitting

* Belmore Collection, plate 7.

† See an example in the British Museum, from the Wilkinson Collection, Case 1, Great Saloon.

‡ See for examples of both this sceptre and the ankh, the colossal statues of the goddess Pasht or Bubastis at the British Museum, Lower Saloon.

§ Belmore Collection.

|| Or Num, according to Dr. Birch.

in the sacred boat Baris, while the goddess Ranno (fig. 56), as a serpent, canopies him with her divine hypostasis, a sub-



Fig. 56. The sacred boat (Baris) of the sun, with the head of Amun, the supreme deity, encompassed by the serpent of goodness. (From the sarcophagus of Oimenepthah I.)

ject exactly similar to the vignette on the mummy-case of Aero Ai, before referred to, excepting that in this case the deity is Kneph-, and in the other, Horus-Ra. Both may probably idealize the same theory,—abstract immortality. It must, however, not be overlooked that, while in the case of Horus, Ranno wears the crown of the united kingdom, in that of Kneph-Ra she is coronated with the head-dress of Osiris,

Fig. 57. Sepulchral tablet representing the worship of the goddess Ranno. (Same collection.)

the avenger and judge of all men. In fig. 57,* which, like fig. 56, is defective, a priest is figured adoring Mersokar, the goddess of Upper Egypt, and presenting for her acceptance a tablet of cakes and bread. One remarkable peculiarity distinguishes this tablet: the goddess herself is not only drawn as a uræus, but her crest is surmounted by a head-dress formed of three uræi, each wearing the solar disk, as if to indicate a trinity of potentiality, or the junction of the offices of Isis, Nepthys, and Osiris, in her own person, three being, as is well known, the common Egyptian numerograph for completeness.

* Belmore Collection, plate 8.

Fig. 58, * the last and most singular state in the whole collection, is of a very different class to the preceding; and it is to be regretted that Egyptologists are not yet decided as to



Fig. 58. Adoration of an unknown species of coluber. (Same collection.)

its actual signification. Before a large and slender serpent, more resembling Apophis than any other of the mystic snakes of Egypt, kneels upon one knee an adoring worshipper. He is not, as in other instances, shielding or hiding his face with his hands, but is uplifting them in the usual attitude hieroglyphically adopted to signify the verb "to pray." The great snake itself is coiled in four upright convolutions, and appears to regard the suppliant with a majestic and not ungentle aspect. Although resembling Apophis (fig. 59), this reptile



Fig. 59. The cartouch containing the name of the last but one of the Hycsos kings, who was named Apophis after the great serpent of evil whom his predecessors worshipped.

cannot be identified with that monster, for there is no example of direct worship paid to the evil creature throughout

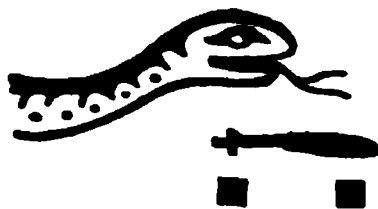


Fig. 60. Head of the serpent Apophis, with the hieroglyphics composing his name.

* Belmore Collection, plate 7.

the whole of Egyptian Mythology,* unless, indeed, we identify it with Sutekh, as the shepherd kings, the last but one of whom was named *Apophis* (fig. 60), appear to have done; and in that case the innovation led to a sanguinary revolution, which terminated the sway of the seventeenth dynasty, according to some chronologers 2214 B.C.† The probability, therefore, is that the adoration intended on this last tablet was offered to one of the household serpentine divinities analogous to that which obtained, in after-time, among the Romans, who, in all likelihood, derived it through the Etruscans, from the Egyptians themselves.‡ With respect to the kind of food offered in all these cases to serpent deities, Sir Gardner Wilkinson, in his

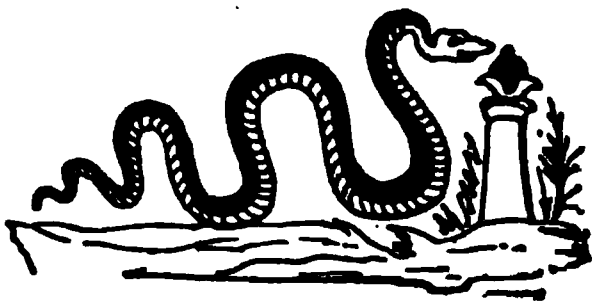


Fig. 61. The domestic snake of the Romans, with the altar containing a cluster of fruit. (From Gell and Gandy's *Pompeii*.)

great but imperfect, because *passé*, work, has a most interesting paragraph, which it will be only proper here to introduce.

“Ælian§ relates many strange stories of the asp|| and the respect paid to it by the Egyptians; but we may suppose that in his sixteen species of asps¶ other snakes were included.** He also speaks of a dragon, which was sacred in the Egyptian Melite, and another kind of snake called *Paries* or *Paruas*, dedicated to Æsculapius.†† The serpent of Melite had priests and ministers, a table and a bowl.‡‡ It was kept in a tower (fig. 61) and fed by the priests with cakes §§ made of flour and honey, which they placed there in the bowl. Having done this, they retired. The next day, on returning to the apart-

* Le Page Renouf, *ex. gr.*, in a letter to the author.

† Lenormant, *Ancient History*, vol. i. p. 197.

‡ See Gell and Gandy's *Pompeiana*, plate 76, for illustrations of mural paintings representing the Roman household serpents (Fig. 61.)

§ Ælian, x. 31, xi. 32, iv. 54. || Pliny, viii. 23.

¶ Ælian, x. 31.

** Ælian, xi. c. 17.

†† It is evident from Pausanias, that the dragon of the Greeks was only a large kind of snake, with, as he says, “scales like a pine cone.”

‡‡ Ælian, viii. c. 19.

§§ Cakes seem to have been usually given to the snakes of antiquity, as to the dragon of the Hesperides.—*Æneid*, iv. 483.

ment, the food was found to be eaten, and the same quantity was again put into the bowl, for it was not lawful for any one to see the sacred reptile.”*

“According to Juvenal,† the priests of Isis, in his time, contrived that the silver idols of snakes, kept in her temple, should move their heads to a supplicating votary.”—*Ancient Egyptians*, vol. v. pp. 240-1.

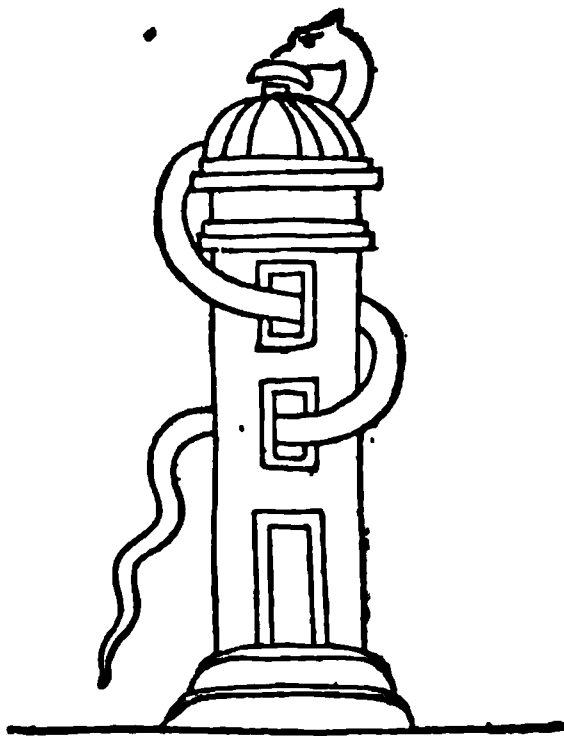


Fig. 62. The serpent in the tower. From a Gnostic gem. (Montfaucon.)

All this is in exact accordance with monumental evidence, and in harmony with one of the most curious of the Apocryphal books, the story of Bel and the Dragon.

12. Return we now to the serpent, the rise of whose myth is more immediately before us,—APOPHIS,‡ “the Destroyer.” Prominent above all other species of reptile, a king among his genus, this baleful serpent twines his imbricated folds, as it were, around the stem of the ancestral tree of the Egyptian Theogony, and with brazen head and fiery eyes§ stands forth in awful prominence. Vengeful and mysterious, always a malignant being, he was chosen to represent the very impersonation of spiritual, as his brother Typhon, or Baal, was of physical, evil. For the remainder then of this, not

* Cf. Ovid, lib. ii. *Amor. Eleg.* 13 to Isis: “Labatur circa donaria serpens.”

† “Et movisse caput visa est argentea serpens.”—Juvenal, *Sat. VI.* 537.
“Gently the silver serpent seems to nod.”—Holyday’s Translation.

“The silver snake
Abhorrent of the deed, was seen to quake.”
Gifford’s rendering.

‡ Apophis = 𓂏𓂏 - 𓂏𓂏 duplicate of 𓂏 nose, wrath, 𓂏𓂏 foaming with rage (*anaph*).

§ The usual epithets applied to Apophis, in the Ritual of the Dead and the Litany of the Sun.

exhaustive but indicative, essay, his cultus claims, and must receive, our sole and best attention.* This fearful monster, called also the Giant, the Enemy, and the Devourer, was believed to inhabit the depths of that mysterious ocean upon which the Baris, or boat of the sun, was navigated by the gods through the hours of day and night; in the celestial regions. In not a few instances he was identified with Typhon,† the murderer of Osiris the (Rhot-Amenti, or judge of the dead), and the antagonist of Chefer-Ra, the benevolent creator, by whose son, the juvenile divinity



Fig. 63. The Osirian and the goddess Isis bringing Apophis wounded and bound to be slain in the head by Horus. Isis stands at the head, and the Osirian at the tail of Apophis. (Sharpe, *Sar. Oimen.*)

Horus (fig. 63), he is eventually overcome, aided by the united efforts of Isis, the Queen of Heaven, sister-consort of Osiris, and the twelve lesser deities of the heavenly powers. All this,

Fig. 64. The gods Set and Horus, united as *one* divinity, between the triple serpent of good. Executed prior to the time of the obliteration of all remains of the worship of Set, who was subsequently confounded with Apophis. (*Sar. Oimen.*)

* Occasionally Apophis is drawn with the crown of the lower kingdom upon his head, which, however, is not extraordinary, as the religion of the Delta had a great deal more of animal-worship in it than that of the Thebaid, and there the gods were venerated more from fear than love.

† In later Greco-Roman times, as in the earlier period, Apophis is also identified with Set, or Seth, the ass-headed deity of the Syrian or Hyesis tribes. One very late monument indeed speaks of "Seth, who is the Apophis of the waters."—Bunsen, i. 427.

and much more which is wholly inexplicable, is derived from perhaps the oldest of all uninspired liturgies, that most remarkable combination of prayers, incantations, and confessions, which extends over 166 chapters, and is called in hieroglyphy, "The Book of the Manifestation to Light," or the Ritual of the Dead. This work may be almost certainly traced back to the reign of Hesepti, of the first dynasty, according to Lenormant,* whose era is 5004 B.C., and to that of Menkera, the Mycerinus of Herodotus, of the fourth dynasty, 4325 B.C.† The names of both of these early Pharaohs occur in the text itself, although—and this is a most important incident to note—the final revision of the work, and a few additional chapters, were added as late as the period of Ethiopian conquest of Egypt, under the twenty-sixth dynasty, 665 B.C. Throughout this wonderful Ritual the idea of the serpent, as the soul of the world, and another variety of it, the Apophis, as the evil being, both antalogues of each other, occurs again and again, the soul has to arm itself against its machinations, and the body to be protected from its malignity. The deceased, when soul and body are reunited in the Amenti, or Egyptian Sheol, has to do combat with it, and the aid of every divinity is in turn invoked to overcome the enemy of the sun.‡ This will become still more apparent as we proceed to examine the Ritual, following the analysis of M. Lenormant and Dr. Birch, the while illustrating our examination by extracts from the mysterious document itself.

13. The opening chapter (1) of this ancient formulary is thus headed—"The beginning of the Chapters of the coming forth from the Day of bearing the Dead (spirits) in Hades (Ker-neter) said on the day of the funeral . . . by the (soul of) the Osirian deceased." In this prefatory portion of the Ritual, the deceased, addressing the deity of Hades, by the mouth of Thoth,§ the god of writing, enumerates all his claims to his favour, and asks for admittance into his dominions. Here at once appears the first indication of the contest against

* *Manual of the Ancient History of the East*, vol. i., whose chronology is a fair *via media* between the extravagancies of the French, and the incredulities of the English, school.

† The enormous antiquity ascribed by these authors to the Egyptian empire is neither generally accepted or even avowed, as the materials are still too few to fix a chronological table with any certainty.

‡ The modern Jews recite many blessings as they clothe themselves in the morning on rising, a system apparently borrowed from the Zendavesta Liturgy.—Anquetil du Perron, *Adoration of Ormuzd*.

§ Mercury, or Hermes Psychopompos, of the Greek Pantheon.

Apophis, the evil being, by the soul of the deceased exclaiming to the gods: "I have fought for *thee*. I come to expel the wicked [literally 'the opposers' of Satan the accuser] from Skhem (the heavenly region)." To this appeal the souls of the previously deceased, reply by interceding with Osiris for the admission of the applicant; speaking, as in the ancient idiom, of themselves in the third person, they exclaim: "Oh, companions of souls, made in the house of Osiris, accompany ye the soul of the Osirian, with yourselves, to the house of Osiris! Let him see as ye see; let him hear as ye hear; let him stand as ye stand; let him sit as ye sit! Oh, givers of food and drink to the spirits and souls made in the house of Osiris, give ye food and drink in due season to the Osirian with yourselves! Oh, openers of roads and guides of paths to the soul made in the abode of Osiris, open ye the roads, level ye the paths to the Osiris with yourselves!"* The result of this intercessional chorus is, that, "He enters the gate of Osiris; he is not found wanting in the balance; he goes in with exultation; he comes out (or passes through) in peace; he is like the demons in heaven; he is justified!"

14. After this grand exordium follow many short paragraphs (ii. to xiv.) of far less significance, relating chiefly to the body of the deceased, and the preliminary ceremonies of his funeral. These occupy the second to the fourteenth chapters. At last the soul of the deceased passes through the gates of the Kerneter (Hades), which, by the way, is a *subterranean* sphere, and at its entry is dazzled by the glory of the sun, which it now sees for the first time since its departure from the body (chap. xv.). Awe-struck with praise and admiration, thus the Osirian, or rather his soul, addresses the beneficent emblem of the Creator:—"Hail! Sun, Lord of the sunbeams, Lord of eternity! Hail! O Sun, Creator! self-created! Perfect is thy light in the horizon, illuminating the world with thy rays! All the gods rejoice when they see the King of Heaven! Glory to thee, shining in the firmament: thou hast shone, thou hast rendered it divine, making festive all countries, cities, and temples; supported by thy goodness; giving victory, first of the first; illuminating the Osirian in Hades, smiting the evil, placing him out of sin, and letting him be with the great blessed! Hail! thou judge of the gods, weighing words in Hades. Hail! thou who art over the gods. Hail! thou who

* Cf. Isaiah (xl. 3): "Prepare ye the way of the Lord; make straight in the desert a highway for our God."

hast cut in pieces the scorner, *and strangled the Apophis!* (Thou art the good peace of the souls of the dead!)* Oh! Creator, Father of the gods, incorruptible!" With this magnificent apostrophe concludes the first part of the Ritual.

15. In the second section of the book are traced the journeys and migrations of the soul in the lower region or Hades, to prepare it for which a long and complicated creed is introduced, forming the sixteenth chapter, or "the Egyptian faith." This section is accompanied, as indeed is every chapter, with a large vignette, representing the most sacred symbols of the mystic religion; and the text contains a description of these figures, with their mystical explanation. At first these are sufficiently clear, but, as they advance, a higher and more obscure region is reached; and, as it not unfrequently happens in theological works, the explanation ends by being more obscure than the symbols intended to be explained. This arises in a great measure from the rubrics added on to the text at a later date, probably in the nineteenth dynasty; and also to the esoteric, or magical invocations, which (by the same principle as the secreta in the Roman Missal) were ordered to be said privately by the embalmer on behalf of the deceased, and by the soul itself before the Hadean deities. In process of time these glosses and rubrics became confused with the Ritual, and by the ignorance of the Egyptian scribes, who had lost the knowledge of the sacred language they copied.† The confusion is thus rendered now almost inextricable. To make this apparent, a few sentences from the chapter shall here follow. The soul speaks, as before, sometimes in the third person, or else in the character of each of the principal divinities, by hypostatic union. The rubrics are here italicised, and the glosses printed in capitals. "I am the great God creating himself. IT IS WATER OR NU, WHO IS THE FATHER OF THE GODS. *Let him explain it.* I am yesterday [pre-existent eternity]. I know the morning [future eternity]. *Let him explain it.* YESTERDAY IS OSIRIS, THE MORNING THE SUN. The day on which are strangled the deriders of the universal lord. Soul of the Sun is his name! Begotten by Himself is his name! *Let him explain it.* I am the soul in two halves. *Let him explain it.* THE SOUL IN TWO HALVES IS THE SOUL OF THE SUN, AND THE SOUL OF OSIRIS. He (the soul) is conceived by Isis, engendered by Nephtys. Isis corrects his crimes, Nephtys cuts away his failings.

* Lenormant's rendering.

† As the modern Brahmin has that of the Vedic Sanscrit.

Millions of arms touch me, pure spirits approach me, evil-doers and all enemies avoid me; I live as I wished. *Let him explain it.*" It may a little clear off the obscurity of the preceding passages to quote, from another papyrus, "The soul, which dies like Osiris, rises again like the sun (Ra)." *

16. After the chapter on faith, follow a series of prayers to be pronounced during the process of embalming, whilst the body is being enveloped in its wrappers. These invocations are addressed to Thoth, who, as among the Greeks, performed the office of psychopompe, or conductor of souls. Throughout these are continual references to the mythic contest between Osiris and his half-brother Typhon, or Apophis, whom, by the assistance of his son, the mediator Horus, he finally overcomes, not however till he has himself upon this world been slain and dismembered by his opponent. Here, as elsewhere,



Fig. 65. Head of the goddess Typho, deity of gestation, with the usual feminine uræus. (Bunsen.)

Apophis, the great serpent, represents Typhon (fig. 65) as the evil principle, and the deceased implores, or rather the embalming priests do for him, that Thoth will assist him to assume the character of Horus, "the avenger of his father," that "his heart may be filled with delight, and his house be at peace before the head of the universal lord." To this petition the deity responds, "Let him go"; and the rubric adds: "This chapter being said, a person comes pure from the day he has been laid out, making all the transmigrations to place his heart. Should this chapter (have been attended to by him),† he (proceeds from above the earth,) he comes forth from all flame; no evil thing approaches him in pure clothes for millions of ages."

17. The body once wrapped in its coverings, and the soul well provided with a store of necessary knowledge, and able further to repeat and to explain the principles of the Egyptian faith, the deceased commences his journey; but as he is still

* Pierret, *Dogme de la Résurrection*. 1871.

† "Should this chapter have been inscribed or repeated over him."—Le Page Renouf. Or, "He goes forth upon the earth."—*Id.*

unable to move, and has not yet acquired the use of his limbs, it is necessary to address the gods, who successively restore all the faculties he possessed during life, so that he can stand upright, walk, speak, eat, and fight against the serpent Apophis, and his adherents. This process occupies chapters xxi. to xxix., which form the section called the "Reconstruction of the deceased." Osiris opens his mouth, gives him power to speak, restores his mind, &c.; and thus prepared he starts; he holds the pectoral scarabeus over his heart as a talisman, and then triumphantly passes from the gates of Hades, exclaiming as he does so: "I flourish upon earth; I never die in the west; I flourish as a spirit there for ever" (chap. xxx.).

18. From the first step, however, the actual conflict of the soul begins; terrible obstacles present themselves in its way; frightful Apophic monsters, servants of Typhon, crocodiles on land and in water, serpents of all kinds, tortoises, and other reptiles, more wild and terrible than Fuseli ever imagined, or Breughel drew, assail the deceased, and attempt to devour him.

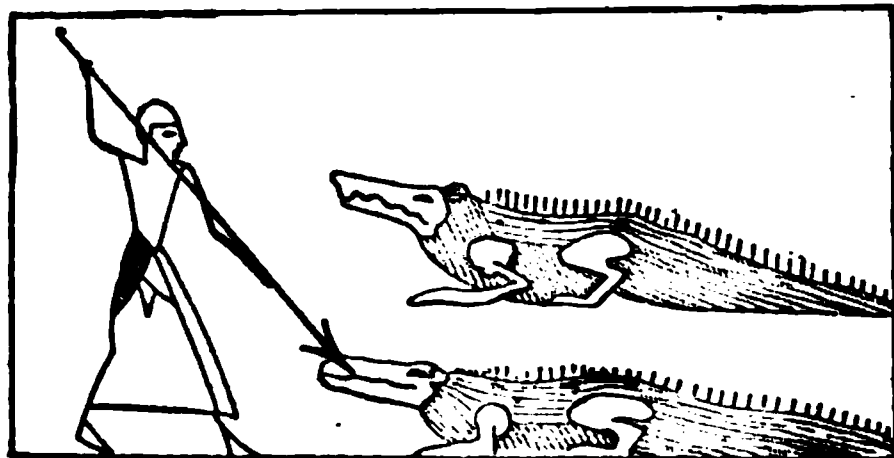


Fig. 66. The Osirian repelling the crocodiles in Amenti. (Sharpe, from the *Todtenbok* by Lepsius.)

19. First approaches the crocodile of Seb (fig. 66), whom he apostrophizes thus:—

"Stop, go back, O crocodile, from coming to me. I know thee by my spells. Thou darest not speak the name of the great God,* because I myself have come. I perceive, I prevail, I judge; I have defended myself; I have sat in the birthplace of Osiris; born with him, I renew myself like him."—Bunsen's translation, chap. xxxi.

"Back, crocodile Hem, back, crocodile Shui. Come not against me. I

* The mystic name of deity among the Greeks, or the Tetragrammaton, was likewise not allowed to be uttered. The Jews have a similar notion concerning the word יהוה, which they asserted enabled Jesus to perform all his miracles, by stealing the pronunciation of it from the high priest while playing in the temple area.

have knowledge of potent spells. Utter not the name of the great God."—Renouf's translation.

By these adjurations the crocodile is repelled.

20. Four other crocodiles now approach, one from each quarter of the world; but these are also driven back by the Osirian, with the following precatious:—

"My father saves me from the eight crocodiles. Back, crocodile of the west, living off those that never rest, I am not given to thee. Back, crocodile in the east, do not turn me, I have not been given to thee. Back, crocodile of the south, living off the unclean, do not gore me with thy claw, I am not given to thee. Back, crocodile of the north, spit thou thy venom away from my head, I am not given to thee. My face is open, my heart is in its place, my head is on me daily; I am the sun creating himself, no evil thing injures me" (chap. xxxii.).

21. These driven away, a viper approaches the Osirian, which, with a spear, he turns back, addressing it thus:—

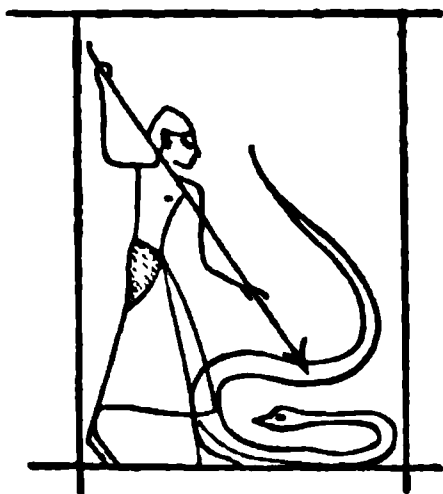


Fig. 67. The Osirian repelling the viper Ru in Amenti. (Sharpe, as above.)

"O walking viper, makest thou Seb and Shu (the deities) stop. Thou hast eaten the abominable rat of the sun; thou hast devoured the bones of the filthy cat" (chap. xxxiii.).

Or—

"O viper Ru, advance not. Mine is the virtue of Seb and Shu. Thou hast eaten the rat which the sun abominates."*

22. Other combats follow; the deceased and the reptiles, against which he contends, mutually insulting and menacing each other in a perfectly Homeric fashion. At last, in the 39th chapter, a serpent sent forth from Apophis attacks him, breathing out venom and fire, but in vain; with his weapon the Osirian repels the reptiles, accompanying the action with these words:—

"Back, thou precursor, the sent forth from Apophis; thou shalt be

* This is the literal rendering of a passage, which means simply, "I am Seb and Shu."—Renouf.

drowned in the pool of the firmament, where thy father has ordered thee to be cut up. Back, block of stone, thy destruction is ordered for thee by ruth (Thmei). The precursors of Apophis, the accusers of the sun are overthrown."

23. Thus baffled, the terrible serpent would withdraw; but he is not thus to escape punishment, for the deceased, assuming the character of each of the lesser gods in turn, assists them to loosen the ropes from the back of the sun, and therewith to bind the Apophis. Other deities, with snares

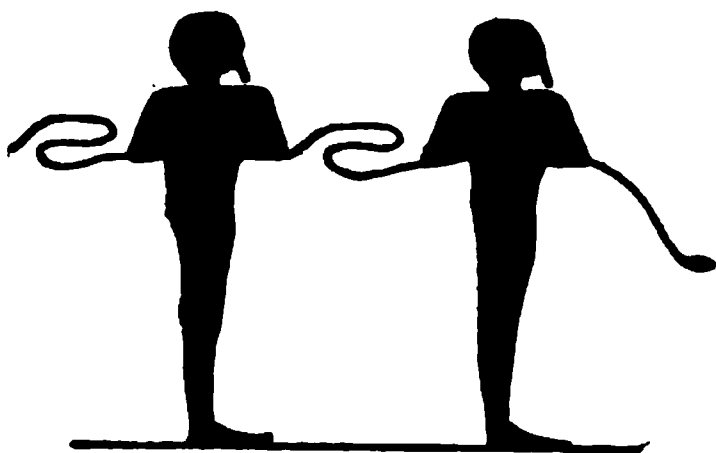


Fig. 68. The gods holding Apophis back. (Sar. Oimen.)

and nets, search the celestial lake in pursuit of the hideous reptile (fig. 68), whom at last they find, and whose struggles

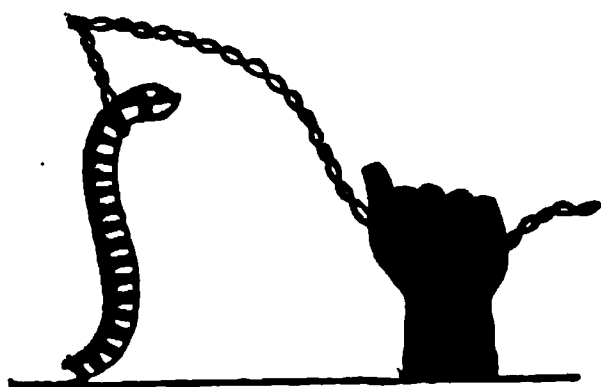


Fig. 69. The hand of Amun restraining the malevolence of Apophis. (Sar. Oimen.) would overturn the boat of the sun, and immerse the deities in the water, if it were not for an enormous mystic hand (fig. 69) (that of Amun), which, suddenly arising from the

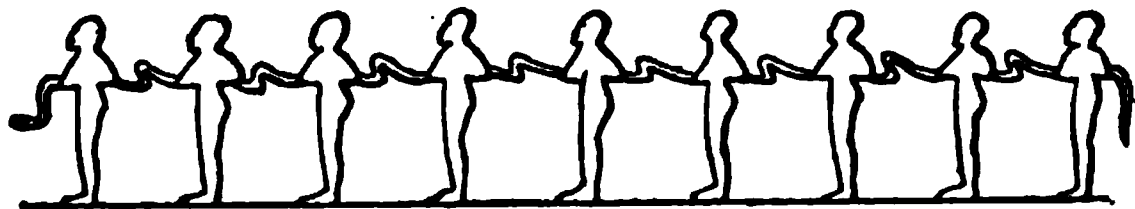


Fig. 70. Another vignette representing the same subject. (Sar. Oimen.)

depths below, seizes the rope, and thus secures the Evil One (fig. 70). Once fastened, Horus wounds the snake in the head with his spear,* while the deceased and the

* Here the mythic contests of Vishnū and the great serpent Caliya, in Hindū theology, will at once occur to the recollection of the reader.

guardian deities, standing upon its voluminous folds, stab the Apophic monster with knives and lances (fig. 71).*

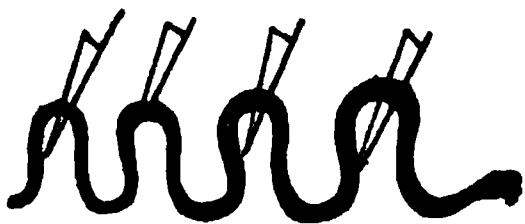


Fig. 71. Apophis transfixed by knives. (Sar. Oimen.)

Wounded, tortured, and a prisoner, the great snake is at last destroyed and annihilated,† and the boat of the sun shortly after attains the extreme limit of the horizon, and disappears in the heavenly region of Amenti, or the west.‡ It has been necessary a little to anticipate this struggle of good against evil, the origin of the Persian dualistic system, and the Ophite Gnostic heresy, necessary, because the soul of the deceased, in the character of the gods, performs these avenging acts, and in the taunting speeches which preface them, declares the supreme sovereignty of *one* Divine being,§ the creator alike of good and evil, the rewarder of all the just, and the ultimate annihilator of the wicked. This prefaced, the following extracts from the 39th chapter of the Ritual will now become intelligible. It is the soul who is accosting the baffled Apophis, and prophetically foretelling his future conquest of it by speaking in the past and present tenses.

“I act peaceably for thee, O sun ; I make the haul of thy rope, O sun. The Apophis is overthrown ; the cords of all the gods bind the south, north, east, and west. Their cords are on him. Victory, the sphinx, has overthrown him ; the god Harubah has knotted him. The Apophis and accusers of the sun fall, overthrown is the advance of Apophis. [To Apophis]: Thy tongue is greater than the envious tongue of a scorpion which has been made to thee ; it has failed in its power for ever. Back, thy hard head is cut ; the gods drag thy limbs and cut thy arms. [To Horus]: O Horus, the water of the sun is stopped by thee. The great Apophis, the accuser of the sun, has been judged by Akar. (?) Lift ye up your good faces. The wicked one has been stopped by the assembled gods ; he has been received by Nu (the deity Chnuphis). He stands, and the great gods are victors towing him. Athor and the gods drag him exhausted, avenging the sun four times [an Egyptian idiom, signifying perfectly] against the Apophis.”||

* Bonomi, *Sarcophagus of Oimenephthah I.*, Plates 2, 3, 7, and 8.

† Cf. Isaiah xxvii. 1 ; Rev. xii. 9 ; Job xxvi. 13.

‡ Champollion, *Lettres écrites sur l’Egypte*, 1833, p. 232.

§ “I make peace and create evil.”—Isaiah xlv. 7.

|| The whole of this chapter is dreadfully corrupt, and unintelligible except by bits.—Renouf.

24. After this triumphant victory, the deceased, or rather his soul, breaks out into a song of triumph. He declares himself to be identical with the great gods, and likens the members of his body to those of the gods to whom they are dedicated, and by whom they are protected. He even boasts that he has the strength of Typhon, whom he has overthrown, and thus he declares his members to be dedicated, and equal, to those of the following deities:—

The Dedication of different parts of the body (chap. xlii.).

My Hair is in shape (au) that of Nu.*

| | | | |
|---------------------|---|---|-------------------------------------|
| „ Face | „ | „ | Ra. |
| „ Eyes - | „ | „ | Athor. |
| „ Ears | „ | „ | Spheru. |
| „ Nose | „ | „ | Khentskhem. |
| „ Lips | „ | „ | Anup. |
| „ Teeth | „ | „ | Selk. |
| „ Neck | „ | „ | Isis. |
| „ Arms | „ | „ | Lord of Tattu (the soul). |
| „ Elbows | „ | „ | Neith, of Sais. |
| „ Legs | „ | „ | Mentu, of Khar. |
| „ Belly and Back | „ | „ | Seb, or Thoth. |
| „ Spine | „ | „ | Acht. |
| „ Phallus | „ | „ | Osiris. |
| „ Thigh | „ | „ | Eye of Horus. |
| „ Legs (2) | „ | „ | Nu. |
| „ Feet | „ | „ | Pthah. |
| „ Arms | „ | „ | Her Heft, or Sheft (the ram-headed) |
| „ Fingers and Nails | „ | „ | Living Uraï. |

There is not a limb of him (the Osirian) without a god. He it is who comes out sound: immortal is his name. He dies not again. He is escaped from all evil things. He is Horus (in his capacity of the destroyer of Apophis), who lives amongst millions.

(This chapter concludes the section entitled the Preservation of the Body in Hades.)

25. After these exhausting labours the Osirian needs rest, and for a while he waits in Amenti to recruit his strength, and satisfy his hunger (chaps. xliii. to lvi.). He has escaped great dangers, and has not gone astray in the mystic desert,

* The verb *au* may be either indicative or subjunctive. I believe the context requires it to be subjunctive, and that all this is a prayer thus: "Let the hair of the Osirian be that of Nu (or become Nu) Let there not be a limb of him without a god."—Renouf.

where he would have died of hunger and thirst (chaps. li.—liii.). At last he reaches the sacred sycamore, or tree of life,* in the

Fig. 72. The goddess Nu in the sacred sycamore-tree, pouring out the water of life to the Osirian and his soul, represented as a bird, in Ament. (Sharpe, from a funeral stela in the British Museum.)

midst of the boughs of which the goddess Nut (fig. 72) is stationed. She, pitying his exhausted condition, and anxious to aid his further progress, gives him heavenly bread, with supernatural virtues of sustentation, and a fluid which is expressly termed "the water of life." This having drunk, grateful and refreshed, the Osirian exclaims, "I grow, I live, I breathe again!" and prepares to recommence his journey to reach the first gate of heaven.†

26. Then commences a long dialogue between the deceased and the personification of the divine light, who instructs him in a chapter called the Manifestation to Light (chap. lxiv.). This dialogue presents a most remarkable resemblance to the dialogue prefixed to the books given by the Alexandrian Greeks as translations of the ancient religious writings of Egypt, between Thoth (Hermes Trismegistus) and the Light, the latter explaining to Thoth the most sublime mysteries of nature. This portion is certainly one of the best and grandest of the Ritual, and is doubtless the source of all that is mystical and profound in the so-called Hermetic books of the later Platonists.§

27. The Osirian having passed the first gate, continues to advance, guided by this new light, to whom, in the lxxth to the lxxvth chapters, he addresses his invocations. He then

* The tree of life is sometimes represented as a persea, or peach-tree, groves of which formerly adorned the inner courts of many Egyptian temples, and the last specimen of which in Egypt existed till very lately in the garden of a convent at Cairo, but has been recently wantonly destroyed.

† Wilkinson, vol. i. p. 391.

‡ Lenormant, *in loco*.

§ *Ritual*, cap. lix.

enters on a series of transformation, more and more elevated, assuming the form of, and identifying himself with, the noblest divine symbols. He is changed successively into a hawk, emblem of Horus-Ra (chap. lxxvii.); an angel, or a divine messenger (chaps. lxxix., lxxx.); into a lotus (lxxxii.); the "pure lily which comes out of the fields of the sun"; into the god Pthah (lxxxiii.), in which hypostasis he declares "he is stronger than the lord of many years"; into a kind of crested heron, the sacred bird of Osiris, called Bennu (chap. lxxxiv.), whose residence is on the boughs of the tree of life; into a crane, or a species of nycticorax (chap. lxxxv.); into a human-headed bird,* the most usual of all emblematic representations of the soul, a bird, moreover, occasionally represented as furnished with human hands, which it holds up in adoration to the sun (chap. lxxxvi.); into a swallow (chap. lxxxvii.), in which latter form the soul utters this remarkable expression, "O great one, I have dissipated my sins; I have destroyed my failings, for I have got rid of the sins which detained me upon earth"; next into a *serpent*, the soul of the earth; and here, although in one form the serpent of the earth is confounded with Apophis, in another it is distinct, a circumstance which has misled many students in comparative mythology. As the chapter (lxxxviii.) is a short one, it will be as well to re-insert it entire.

"I am the serpent Ba-tat (not Apophis), [or 'Sata (the serpent) of long years, in the extremities of the earth.'—Renouf,] soul of the earth, whose length is years, laid out and born daily; I am the soul of the earth in the parts of the earth; I am laid out and born, decay and become young daily." (See *suprà*, fig. 39.)

28. The last transformation of the Osirian is into another reptile; the first of those which on entering Hades he overcame, viz. a crocodile (chap. lxxxix.) no longer "the eater of filth and the opposer of the souls," but the crocodile "who dwells in victories, whose soul comes from men, the great fish (or rather reptile) of Horus." Up to this time the soul of the deceased has been making its journeys alone, it has been merely a sort of εἰδωλον (eidolon), that is an image—a shade with the appearance of the body which yet lay torpid and sensationless. After these transformations, the soul becomes reunited to the body which it will need for the rest of its journey. This theory it was which rendered the process of mummification so important, for it was indispensable that the

* The souls of kings are generally furnished with crowns, as *vide* numerous examples in the Hay collection.

† Bata, *Brass of Earth*.—Dr. Birch.

soul upon its return should find its former residence well and sacredly preserved. "O," cries the body by a sublime paronomasia, "that in the dwelling of the master of life I may be reunited to my glorified soul. Do not order the guardians of Heaven to destroy me, so as to send away my soul from my corpse, and hinder the eye of Horus, who is with thee, from preparing my way" (chap. lxxxix.). The vignette to this chapter is one of the most usual in Egyptian hieroglyphy; it represents the embalmed body laid upon a bier, having under it the four vases for the eviscerated organs; at the side of the couch stands Anubis, the guardian of the dead, preparing the body for its revivification, while above flies a

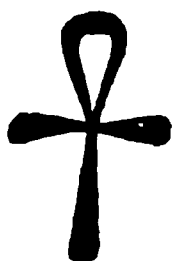


Fig. 73. The ankh, or *crux ansata*, from the very earliest periods the hieroglyph for life, originally supposed to have been an earring.*

human-headed bird, having in one talon the ankh (fig. 73), or tau cross, and in the other a mast and expanded sail, the ideographs for "breath" and life respectively.

29. The deceased traverses next the dwelling of Thoth, who presents him with a roll containing further instructions for his safe progress, and fresh lessons of the heavenly knowledge he is soon to require (chap. xc.). Armed with these, the Osirian arrives on the banks of the subterranean river, separating him from the Elysian fields of Amenti; but there a new danger awaits him. A false boatman, the emissary of the Typhonic Powers (in this instance distinct from Apophis), lays wait for him on his way, and endeavours by deceitful words to get him into his boat, so as to mislead, and take him to the east instead of to the west (chap. xciii.), his proper destination, the shore where he ought to land and rejoin the sun of the lower world. Fortified by his previous instructions, the Osirian again escapes this subtle danger; he remarks the perfidy of the false messenger, and repulses him with bitter reproaches. At last he meets the right vessel to conduct him to his destination (chaps. xcvi., xcvi.); and now in sight of the true boat; over the unknown and fathomless river, he declares that he is prepared "to pass from earth to heaven, to go along to the ever tranquil gods, when they go to cut the Apophis." "I," he con-

* From its sign also being the determinative hieroglyphic of everything pertaining to the ear.

tinues, "I have brought the ropes, stopping the wicked (one) as I go along in the boat of Pthah; I have come from the scalding pools, from the flaming fields, alive from the great pool."*

30. Ere, however, the Osirian can enter the boat of Pthah, it is necessary to ascertain if he is really capable of making the voyage, if the deceased possesses a sufficient amount of the knowledge necessary to his safety, and which he is supposed to have obtained from the papyri presented to him by Thoth. The divine boatmen accordingly proposes a series of questions to his passenger, who declares he has come to see his father Osiris, (having, as before stated, taken the nature and form of Horus,) and to fight the Apophis. This reply satisfies the interlocutor, who bids him "go to the boat, which will carry him to the place he knoweth where." Here a most curious and mystical scene ensues, for each part of the vessel becoming animated, requests the Osirian to "tell me my name," that is, the esoteric meaning of it. Anchor, paddle, mast, poop, hull, planking, all in turn accost, and are in turn replied to, for twenty-three questions and answers; which finished, the deceased entreats the "good beings, lords of truth, who are living for ever, circling for ever," to pass him through "the waters, to give him to eat food, and baked cakes, and a place in the hall of the two truths before the great God." In the hundredth chapter the Osirian, having declared again that he has "stopped the Apophis and turned back its feet," is permitted to embark, and safely crossing the mighty river, lands on the other bank in the land of the mountains of the west, the blessed country of Amenti.

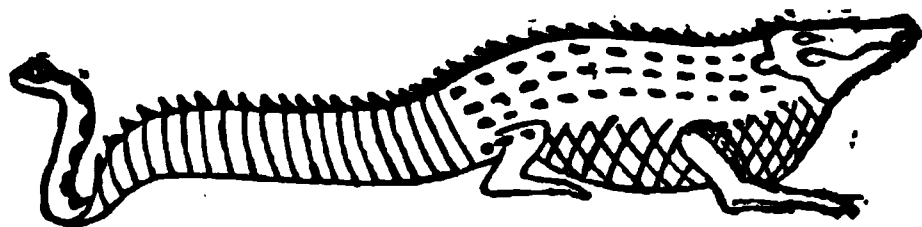


Fig. 74. One of the mystic crocodiles of Amenti, named Shesh-shesh. (Sar. Oimen.

31. Here commence another series of chapters, containing descriptions of and an abstract of the geography of the spirit-land; and here again, as usual in the Ritual, the Ophite myth is interwoven throughout. The blessed region is described as "the valley of Balot,† or abundance, at the end of

* It would be superfluous to do more here than refer to the Greek myths of Hades, Styx, Charon and his boat, and to the mediæval legend of St. Patrick's purgatory, as given in the History of Roger de Wendover; their almost exact analogy is too obvious to be dwelt upon.

† Called more properly the "Valley of Buchat."—Renouf.

heaven, 370 cubits long and 140 broad." In a cavern in one of the holy mountains is the great crocodile Sabak * (chap. cviii.), and at the head of the valley extends an enormous snake thirty cubits long and six in circumference. His head is of stone,† and is three cubits broad, and the name of the terrible supernatural is "Eater of fire." On coming near to this guardian genius, for such the serpent is, the Osirian in secret assumes the character of a similar reptile, and declares "he is the serpent the son of Nu," and presently he boasts that he has "taken the viper of the sun as he was resting at evening," and "that the great snake has coiled round the heaven." Further, "that he is ordered to approach the sun, as the sun is setting from the land of life to his horizon"; that "he knows the passage of spirits, the arrest of the Apophis in it." This seems to be, as nearly as may be guessed, the meaning of this chapter (cviii.), which is one of the most confused in the Ritual.

32. In the next chapter (cix.) is a further description of the heavenly region, on the north of which is a lake called the Lake of Primordial Matter,‡ a chaos in fact; and on the south the lake of Sacred Principles, possibly spiritual essences. In chapter cx. the land of Amenti is further described as a magnified kingdom of Egypt, with its lakes, canals, palaces, fields, &c. There the walls are of iron, and the corn grows seven cubits high. There the sycamore-trees (trees of life)



Fig. 75. The god Nilus or Hapimou encircled by the serpent of eternal years. Possibly the heavenly Nile is here represented. (Wilkinson.)

are of copper, and there the spirits of the blest are dwelling, and the sun shines for ever. In this delightful climate for

* After whom Sabakoph, the Ethiopian, mentioned in 2 Kings xvii. 4, under the name of So, was named. The name is there written נִי־ב.

† An idiom for extreme hardness, a peculiarity common to the frontal plates of certain species of vipers.

‡ Incidentally, the great antiquity of the Ritual is proven by its continual reference to lakes. Seas or oceans, such as the peninsular Hellenes delighted in, do not occur in the mythology of the Egyptians, who, up to the time of Thothmoses, were not aware of the existence of the Atlantic, nor till that of Necho, thought otherwise than that the Mediterranean was a vast lake.

Fig. 78. The Judgment scene in the Hall of the Two Truths. (Taken from a papyrus first engraved by Denon. See next page.)

THE JUDGMENT BY OSIRIS IN THE HALL OF THE TWO TRUTHS.—The first part of this vignette, from an ancient papyrus, represents the mystic weighing, and the second part the intercession, before Osiris. 1. Isis, the Queen of Heaven, who, together with (3) Horus-Ra, introduces the deceased (2) into the Hall of Judgment. In the centre of the picture stands the balance (4), in one scale of which (5) is the heart of the deceased, and in the other a weight (6) in the form of the goddess of Truth; behind the balance is the entrance to hell, guarded by a monster (7); Anubis (8), the guardian of the dead, adjusts the beam, while Thoth (9) records the result upon his tablet. This ends the first scene. In the second part of the picture, Horus-Ra, crowned with the Pschent (11), introduces and pleads for the deceased (10), now invested with the robe of Justification. Before Osiris (13) are the four geni of the body upon an altar of lotus-flowers, being offered as intercessors for the Osirian, their office being specially to plead for the sins committed by that part of the body over which they individually presided. Behind Osiris stand the goddesses Isis and Nephthys, waiting to conduct the justified Osirian into the regions of Amenti.

awhile the Osirian dwells, sowing corn, ploughing with heavenly oxen, and reaping the harvest in the Elysian fields. It was for this purpose that a hoe and a basket full of corn were buried with every Egyptian, that in the future life he might not be unprepared to follow his agricultural labours. There the Osirian freely, and frequently, partakes of the bread of knowledge, which he is shortly to find more necessary than ever, as he has arrived at the end of all his trials but *one*, and that one the last and most terrible, for as yet he is only in a superior kind of *Sheol*, or Hades, undergoing a purification,

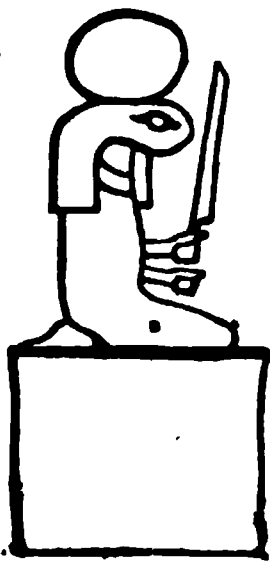


Fig. 77. The avenging Assessor watching to punish the Osirian. (Papyrus, British Museum.)

as in Hades itself his soul was subjected to purgatorial influence conducted by Anubis, the guardian of the dead, the Osirian traverses an unknown labyrinth (chaps. cxiii. to cxxi.); but by the aid of a clue and the assistance of Thoth, he penetrates through all its intricacies and windings, and at last is ushered into the judgment-hall, where Osiris Rhot-Amenti,*



Fig. 78. The snake-headed Assessor standing to interrogate the Osirian. (Wilkinson.)

the judge of the dead, awaits him seated on his throne, surrounded as by a jury, with a court of forty-two assessors, four of whom are serpent-headed (figs. 77, 78). There the

* Whence the Greek name of Pluto, Rhadamanthus, was doubtless derived.
VOL. VI. 2 H

decisive sentence is to be pronounced, either admitting the deceased to happiness, or excluding him for ever (chap. cxxv.).

33. On a raised throne before the Osirian, sits the awful deity Osiris, upon whose head are the double crowns of the united kingdoms of Upper and Lower Egypt, circled with the solar asp or uræus. In his hands are the cross of life, the Cucufa staff of dominion, the curved lituus* denoting sacerdotal authority, and the scourge of Khem. Behind his throne are the avenging Cabereii, children of Typhon or Set, and his consort the hippopotamus-headed goddess (Thoeris) of hell; lastly, underneath his feet, fettered and tortured, lie the souls of the condemned.† Lest the Osirian should quail and be unable to stand before the solemn assembly, the goddesses Isis and Nepthys, deities of the upper and lower firmament respectively, support his trembling footsteps, while Amset, Tautmutf, Kabhsenuf, and Hapi, the guardian deities of the dead, intercede for his protection. On an altar before them, flowers and incense burn in fragrant propitiation, and between it and the judge, in a massive and yet delicate balance, the heart of the deceased is weighed against the feather of Thmei, the goddess of Truth. Thoth, the introducer of spirits, writes down the preponderance of the weight for good or evil, while an ape (the emblem of justice because all his extremities are even), sitting on the summit of the cross-beam, prevents either fraud or favour. Now is the Osirian to give an account of his whole former life, and while each of the forty-two assessors accuses him of some flagrant fault, he has in return to reveal to the questioner his own secret name, and to profess his innocence of the fault alleged. This is called the apology, or the negative confession, and it is one of the most sublime and singular ethical formularies in the whole of ancient mythology. The first part of this address is negative; but as heaven to the Egyptians was not accessible by mere sinlessness, but was the reward only of active virtue, the Osirian, from the evils he has not done, proceeds to the enumeration of the good which he has performed, and entreats not the clemency, but the equity, of the Judge. Extending then his arms towards the deity, thus he addresses the adjudicator Osiris and his coadjutor divinities:—

“O ye Lords of truth, O thou Great God, Lord of truth, I have come to thee, my Lord, I have brought myself to see thy blessings;‡ I have known

* Is this the origin both of the Druidical lituus and the episcopal staff?

† Not always represented on the funeral Papyri. See *Sar Oimen.* pl. 5.

‡ For “blessings” read “splendid glories.”—Renouf.

thee, I have known thy name, I have known the names of the forty-two of the gods who are with thee in the hall of the Two Truths, who live by catching the wicked, and feeding off their blood, in the day of reckoning of words, before the good being, the justified.*

“Rub ye away my faults,† for I have not privily done evil against mankind, neither have I afflicted persons or men ; I have not told falsehoods before the tribunal of truth, I have had no acquaintance with evil, I have not done any wicked thing, I have not made the labouring man perform more than his daily task, I have not been idle, I have not failed, I have not been weak (*in the sense of sinful*), I have not done what is hateful to the gods, I have not calumniated the slave to his master, I have not sacrificed (*filled the office wrongfully of a priest*), I have not murdered, I have not given orders to smite a person privily, I have not done fraud to any man, neither have I altered the measures of the country. I have not injured the images of the gods, I have not withheld milk from the mouths of sucklings, neither have I netted the sacred fish ;‡ I have not stopped running water, I have not robbed the gods of their offered haunches, I have not caused to weep, I have not multiplied words in speaking, I have not blasphemed a god, I have not made a conspiracy, I have not corrupted women or men, neither have I polluted myself ; I have not stolen from the dead, I have not played the hypocrite, I have not caused any to weep, I have not despised any god in my heart ; I am pure, I am pure—let no harm happen to me from the avenging genii ; save, O save me from them.

“O Lords of truth, I have made to the gods the offerings due unto them, I have given food to the hungry, I have given drink to the thirsty, I have given clothes to the naked,§ I have been attentive to the words of truth, I am pure from all sins, I am free from the curse of the wicked, I have done what the gods writ upon earth, I have no sins, and no perversion—place me before thyself, O Lord of Eternity, and let me pass through the roads of darkness and dwell with thee for ever.”

34. To so magnificent an appeal, and to a soul so consciously perfect, but one answer can the deity return. At a signal from Osiris, the deceased is invested in a long white linen robe,||

* “I have brought to you truth, and have blotted out your iniquity.”—*Id.*

† The first clause, literally *un nefer*, may really be not an address but a proper name.—*Id.*

‡ The *Lepidotus*, or *Oxyrhynchus Niloticus*, worshipped at Latopolis as a form of the goddess Athor. — Wilkinson’s *Ancient Egyptians*, vol. ii. pp. 248—251.

§ After naked occurs, in some papyri, the further clause, “and a boat to the shipwrecked.”—Renouf.

|| A specimen of this garment in the Hay collection measured 16 feet by 9, and was furnished with a broad twisted fringe along the outer edge. The name for this garment among the ancient Egyptians was “Basoui.”

fringed with a symbolical fringe along one side of it (the origin possibly of the Jewish *arbang kanphoth*,* *מנעם קנפוט*) and then, while Thoth writes the decree of acquittal upon the rolls of Heaven, the deity and assessors, jointly addressing the Osirian, exclaim, "Go forth, thou who hast been introduced. Thy food is from the eye of God, thy drink is from the eye of God, thy meats are from the eye of God. Go thou forth, O Osirian, justified for ever."

35. After the confession (cxxv.) commences the third part of the Ritual, or the Adoration of the Sun. The chapters in this are more mystical and obscure than any of the preceding. The Osirian, henceforth identified with the sun, traverses with him, and as he, the various houses of heaven, fighting again with the Apophis, and ascending to the lake of celestial fire, the antipodes of the Egyptian hell,† and the source of all light. In its closing chapters the work rises to a still more mystical and higher practical character, and the deceased is finally hypostated into the form of every sacred animal and divinity in the Egyptian Pantheon, and with this grand consummation the Ritual closes. But even in heaven itself the serpent myth is dominant. Not only does the deceased, as the sun, declare

Fig. 79. The Osirian endeavouring to smare the giant Apophis; above his head, as protecting him in his dangerous task, is the winged orb, symbolic of divine interpenetration and assistance. (Sar. Oimen.)

"that he puts forth blows against the Apophis (fig. 79), strangling the wicked in the west" (chap. cxxvi.), but even in the

* See Mill's *The British Jews*.

† What this fearful lake was may be gathered from the following description of the Egyptian Hell.

"Oh! the place of waters—none of the dead can stand in it, its water is of fire, its flow is of fire, it glows with smoking fire; if wished, there is no drinking it. The thirst of those who are in it is inextinguishable. Through the greatness of its terror, and the magnitude of its fear, the gods, the deceased, and the spirits, look at its waters from a distance. Their thirst is inextinguishable; they have no peace; if they wish, they cannot escape it."—*Ritual*, chap. cl. xiii. above.

highest heaven the house of Osiris is entered only by seven pylons, each guarded by an *nræus*, or sacred asp; the name of the first guardian being "Sut or Set"; of the second, "Fire-face"; of the third, "Vigilant"; of the fourth, "Stopper of



Fig. 80. The serpent warder of the gateway of the path of the sun; behind are Horus-Ra, and possibly the serpent Ranno. (Sar. Oimen.)

many Words"; of the fifth, "Consumer"; the sixth, "Stone-face"; and of the seventh, "Stopper of the Rejected,"—all epithets applied to the snake, and sometimes even to Apophis. The next abode of Osiris has twenty-one gates, each containing a different deity (the eighth being a double snake-headed god), armed with swords to destroy the impious intruder. Each of these in turn the Osirian supplicates; and by each he is bidden to pass on, for "thou art justified." Next is approached another abode, entered through fifteen pylons, each surmounted by one, two, or more snakes armed as before, whose names, and that of the snakes, are as follows:—1. Mistress of Terror, and the snake "Vulture"; 2. Mistress of Heaven, and the snake "born of Pthah"; 3. Mistress of Altars, and the snake

Figs. 81, 82. Two more of the mistresses, the lion- and cow-headed respectively.



Fig. 81. "Her name is Skab the Subduer."



Fig. 82. "Her name is Sehnaka, or Beater of the Bulls."

"Subduer" (fig. 81); 4. Hard-man, regent of earth, and the snake "Bull-smiter" (fig. 82); 5. Fire, mistress of the breath of the nostril, and the snake "Retainer of the Profane"; 6. Mistress

of Generations, and the snake "Conspirator";* 7. the Gate of Ruin, and the snake "Destroyer"; 8. Gate of Inextinguishable Fire, and the snake "Protector of the Sacred Eye"; 9. Mistress of Limbo (figs. 83, 84, 85), and the snake "Pride"; 10. Gate of Loud Words, and the snake "Great Clasper"; 11. Gate of Hard-face, and the snake "Terrifier"; 12. Gate of the

The Mistresses or Doorkeepers of Amenti, with the great Uræus above,
(Ritual, cap. cxlv-vi.)

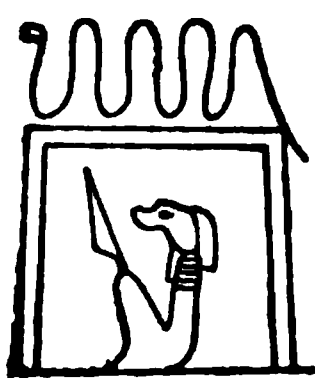
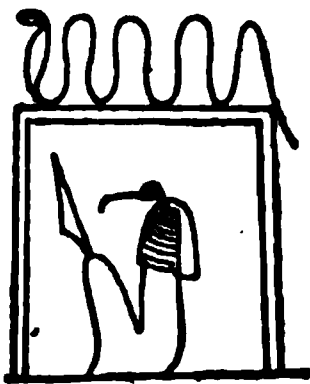
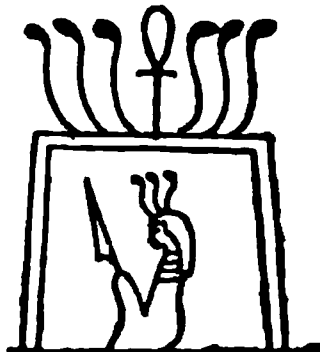


Fig. 83. "Her name is Narau, or Victory."



84. "Her name is Han-nekah, or Commanding the idle."



85. "Her name is Mes-Pthah, or born of Pthah."

Questioner of Earth; 13. Gate of Isis? 14. Mistress of Exultation; 15. Gate of Souls of the Red-haired. The names of the snakes of the four last gates are not given. To these abodes succeed (chap. cxlviii.) seven staircases, whose guardians have the same names as the snakes of the seven gates. Then the Osirian passes to the fourteen abodes of Elysium, in the fourth of which, "on the very high hill in Hades,—the heaven rests upon it," occurs a "snake—Sati is his name. He is



Fig. 86. Ruhak, the great charmer whom the sun has made. (Ritual cap. cxlix.)

about seventy cubits in his coil, and he lives by decapitating the condemned."† In the seventh abode dwells a similar snake,—"Ruhak is its name (fig. 87). He is about seven cubits

* Is this an allusion to the Indo-Germanic myth of the connection between life and fire?—See Cox's *Mythology of the Aryan Nations*; and Kelly, *Indo-Germanic Folk-lore*.

† Is this an exaggeration of the great African rock-snake (*Python regia*), who, by the way, resembles in a remarkable degree the Egyptian figures of Apophis.

in the length of his back, living off the dead, strangling their spirits." Him the Osirian beseeches—

"Draw thy teeth, weaken thy venom, or thou dost not pass by me. Do not send thy venom to me, overthrowing and prostrating me through it."

Or, more properly, "Be thy teeth broken, and thy venom weakened; come not against me, emit not thy venom against me, overthrowing and prostrating (me) through it." (Renouf.) Finally, at the door of the sixteenth abode resides another snake, at the mouth of the heavenly Nile, who is pacified by offerings of food and grain. Other magical addresses follow these, and the rubric of the last chapter ends thus:—"This book is the greatest of all mysteries; do not let the

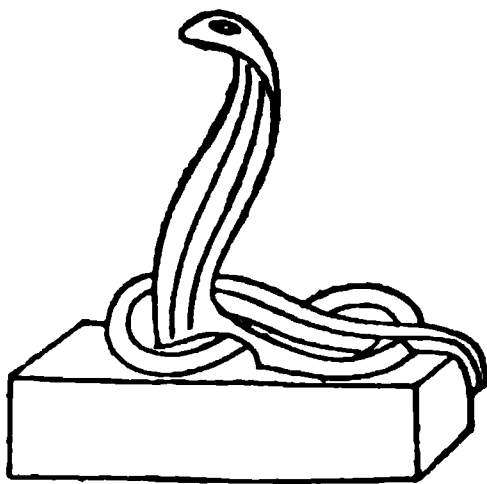


Fig. 87. Wooden votive figure of the goddess Urhapt. (From a statue in the British Museum, restored by the help of a similar figure in the Leyden Museum.)

eye of any one see it, that is detestable. Learn it, hide it, make it. The Book of the Ruler of the Secret Place is it named. It is ended."*

36. Such, then, is a summary of the contents of the most ancient ritual extant. From it have probably been derived all the later systems of Ophiolatry, as in its pages are preserved the deflected echoes of a primitive revelation. Possessing extraordinary coincidences with later dogmas, there is yet little doubt that the condition of the work as we now have it is one of great and wilful mutilation—whole chapters are inverted, and sentences misconstrued. Nor can the result be wondered at when it is recollected that, to quote Professor Lyell,† no language is extant after a lapse of a thousand years,

* Ruhak or Urtuk is, as before mentioned, occasionally represented as a goddess in the form of an upright uræus, with its tail coiled in a kind of bow-knot for a pedestal. Several votivi, in wood, to this goddess are in the British Museum, Cases 10 and 11, Upper Egyptian Saloon.

† *Elements of Geology*.

and the Ritual of the Dead was used and written in ancient Egypt for more than thirty centuries.*

37. Apart, however, from the Ritual, the trail of the serpent is as conspicuous on the monumental history of Egypt as it is

Fig. 88. The solar orb with the emblematic figure of the goddess Thmet, or Truth, between the sacred urai. (Cassell.) See fig. 40.

in the archæographic. Every sepulchral stelè or funereal slab bore at its upper extremity the usual winged disc of Ra, with its pendent basilisks (fig. 88), wearing the alternate crowns of

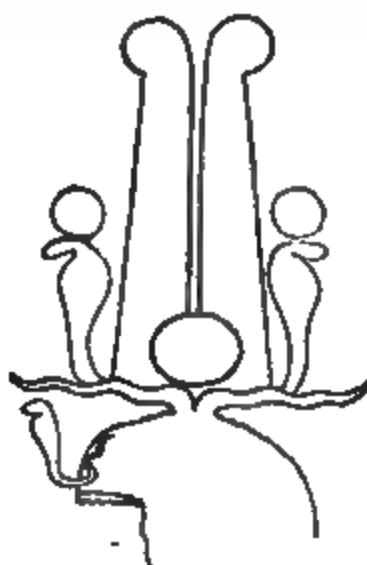


Fig. 89. The royal and sacred head dresses united.

Upper and Lower Egypt and the cross of life. Not unfrequently the god Ra, and even the King himself, as that deity's incarnation, is represented, as a globe surrounded by a serpent, whose tail

* Lenormant's *Ancient History of the East*, vol. i. section vii.

is twisted tightly against the solar disk. The serpent decorated the monarch's crown (fig. 89) and fringed the extremities of his



Fig. 90. Royal girdle fringed with jewelled uræi. From figure of K. Seti Menepthah I. (Arundale.)

girdle (fig. 90). In another instance a sphinx, emblem of regal power, under the title, "Lord of the Horizon" (fig. 91), is represented as supported by, or standing between, two procumbent



Fig. 91. Top of an Egyptian standard Sphinx and uræi, implying heavenly victory. (Leemans.)

uræi.* Sometimes, as on the Soane sarcophagus (one of the most wonderful of all Egyptian sarcophagi, originally executed

Fig. 92. The beetle of Chefer Ra, in the Solar orb, surrounded by the serpent Ranno. Possibly the Egyptian original, as far as the Mythos was concerned, of the Orphic figure, No. 28. (Sar. Oimen.)

about the time of Moses, for Oimenepthah or Seti Menepthah I.), the serpent of eternity environs (fig. 92) the disk of the

* See *Musée de Leide*, Part I., plate 21.

sun with seven involutions,* and the circle is completed by the tail of the reptile being placed in its mouth, as in the Greek

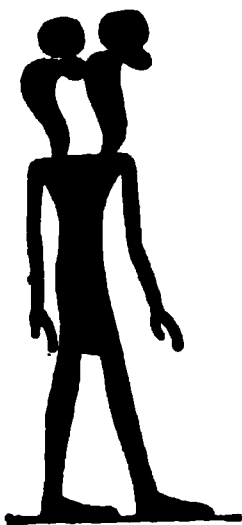


Fig. 93. Double snake-headed deity. (Sar. Oimen.)

interpretation.† In the Museum specimen, however, the Coluber, and not the Naja or Cobra, is the species of snake



Fig. 94. Single snake-headed deity wearing the crown of Lower Egypt. (Sar. Oimen.)

adopted. Again on the same work of art is a long vignette representing a number of deities, many of these again being



Fig. 95. Quadruple snake-headed deity holding forth a knife to slay the Apophis. (Sar. Oimen.)

* A similar representation at the foot of the sarcophagus of Naskatu, at the British Museum, gives nineteen involutions to the same symbolic serpent.
 † See Bonomi's *Sarcophagus of Oimenephthah I.*, plate 5.

snake-headed (fig. 93), with ropes and slings (figs. 94, 95, 96, 97),



Fig. 96. Single snake-headed deity bringing a rope to bind the Apophis. (Sar. Oimen.)

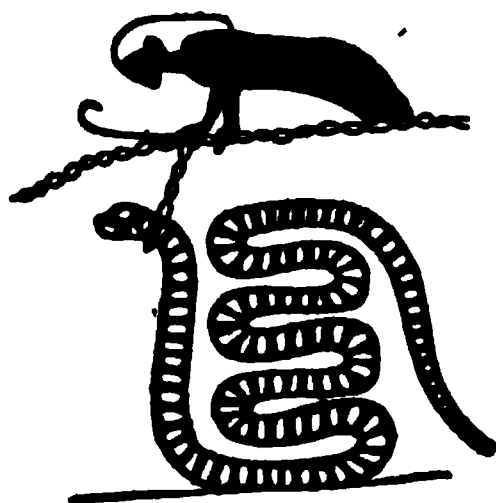


Fig. 97. The deities binding Apophis from above. (Sar. Oimen.)

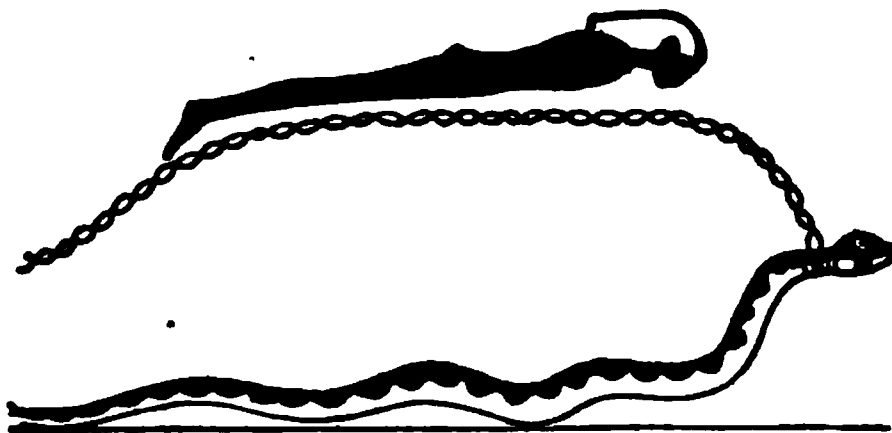


Fig. 98. Another vignette representing the same subject. (Sar. Oimen.)

snaring the Apophis* (fig. 98). Another vignette shows the

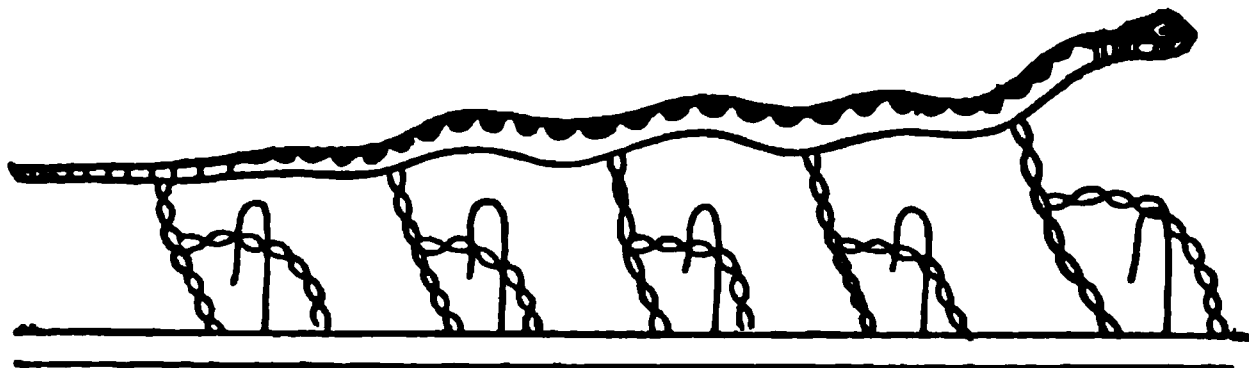


Fig. 99. Apophis bound below with chains and bronze staples. (Sar. Oimen.)

* See Bonomi's *Sarcophagus of Oimenepthah I.*, plate 12.

hand of the Eternal holding the enchained monster; another, Apophis chained to the ground by four chains, symbolizing the four races of mankind, fighting against the evil one (fig. 99);* another, Apophis writhing in agony between the assembled gods, who have transfixed him with many knives; another,† Apophis in the mystic lake folded in twenty-eight convolutions; and lastly,‡ Apophis brought



Fig. 100. The serpent "Fire-face" devouring the wicked; the avenging deities are standing upon his folds to restrain his violence within due bounds. (Sar. Oimen.)

prisoner to Horus Ra and slain by that merciful divinity.§ These, as the Ritual has shown, all belong directly to the myth

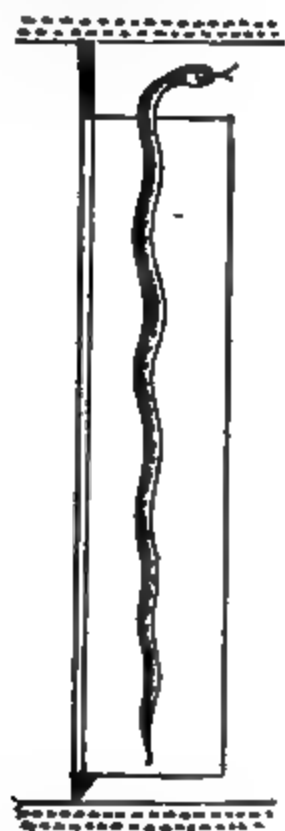


Fig. 101. One of the twelve serpent warders of the twelve doors of Hades. (Sar. Oimen.)

of Apophis; but on the same alabaster sarcophagus is engraven another subject, viz. a troop of wicked men with their hands and

* See Bonomi's *Sarcophagus of Oimeneptah I.*, plate 9.

† *Ib.*, plate 15. ‡ *Ib.*, plate 7. § *Ib.*, plate 11.

bows fastened behind them, led by a guardian demon to the presence of a monstrous apophic reptile, called "Fire-face" (a common Ophite epithet), who breathes flames upon them from his open jaws, and consumes the wicked by the breath of his mouth* (fig. 100†). On other parts of the sarcophagus are further shown the gates of Hades (fig. 101), with the mystical

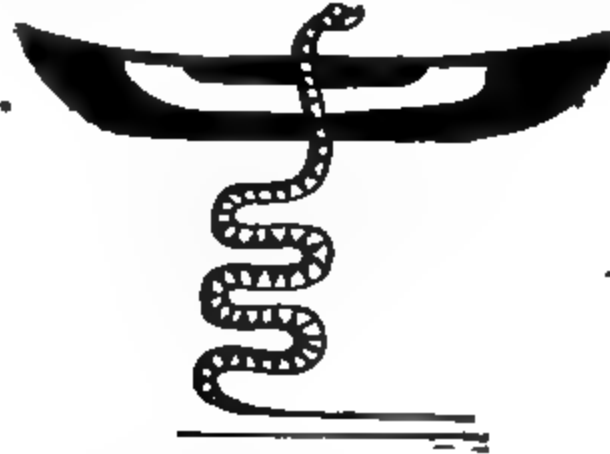


Fig. 102. Winged asp, from the same sarcophagus.‡

serpent warders (fig. 102), the paradise of cypress-trees, guarded by fiery uræi.§ Crocodiles, whose tails end in serpentine forms, Winged serpents, the emblems of the deities Ranno and Maut.

Fig. 103. Four mystic figures treading on a male serpent with the crown of Lower Egypt. The serpent's name is Apta. (Sar. Oimen.)

Serpents walking upon human legs (figs. 103, 104), the usual figure of the god Chnuphis, soul of the world. Serpents with human

* See Bonomi's *Sarcophagus of Oimeneptah I.*, plate 14.

† "O ye wicked, the flames of Amun-Ra are in thy members, they cannot be extinguished for ever."—Birch, *Magical Papyrus in the British Museum*.

‡ For further details on Winged serpents it is only necessary to quote the search of Demeter for Persephone, in a chariot drawn by Winged serpents.—Creuzer, *Symbolik*, iv. 294.

§ These latter objects it is but fair to state are believed by M. Pierret to be the cresting of the Pylons of the abodes of Amenti.

feminine heads, the representations of the god Atmoo,* the god of darkness, and a basilisk with three faces, the significant

Fig. 104. Four figures similar to preceding. Serpents named Hapu. (Sar. Oimen.)
 ideograph of the Egyptian triad of Horus (fig. 106), Isis, and Osiris,—the producing, the producer, and the produced; the



Fig. 105. Votive mummy-case in bronze, containing the mummy of an eel sacred to the god Atum, or Atmoo, the beneficent deity of darkness. (Leemana.)

almost consimilar analogues of the Hindu triad of Elephanta,—Brahma, Vishnu, and Siva.†



Fig. 106. The mystic triune basilisk of Horus, Isis, and Osiris. (Sar. Oimen.)

38. Another sarcophagus illustrating the serpent mythos, is that of Rameses III., the great founder of Medinet Habou, at Cambridge, around the inscribed sides of whose basalt coffin coils an enormous snake; the extremities of the reptile are conjoined, and the figure was probably intended to represent the eternal life of the King protected by the "snake

* Sometimes significantly enough represented by an eel, as in the votive eel in the British Museum, case No. 38. (Fig. 105.)

† See Bonomi's *Sarcophagus of Oimeneptah I.*, plate 11.

whose name is millions of years—millions of days encompass him."

39. An undescribed wooden mummy-case lately sold at the Palais Royal,* Regent Street, bore a similar uncommon delineation. In the British Museum are three terra-cotta groups, very roughly executed, of a mother and child (fig. 107) lying upon a

Fig. 107. Funereal tablet, mother and child, protected by the deity Chauphis.
(British Museum.)

couch with a snake, in this instance not the Coluber, but the Asp, encircling them; probably a flattering statuette, implying that the mother and child of the owner should, like Isis and Horus, enjoy the eternal years of divinity.

40. Thus allusion to Horus recalls a circumstance which must not lightly be passed over.† All serpents, even though divine, were not harmless upon this terrene sphere, and as Horus was the great incarnate son of Osiris, whose mission was to overcome evil and to destroy the Apophis, so that divinity became naturally associated with the office of "stopper of all snakes." Hence arose the custom of inscribing votive cippi to that deity, representing him as a youthful and beautiful being, standing upon the heads of two crocodiles, and holding snakes and scorpions in his hands. Above him is always the horrible head of Baal, or Set-Typhon, and the various attributes of life, dominion, power, goodness, &c., with mystic valedictory inscriptions grouped around him. A very fine specimen in wood, and others smaller in stone, are in the British

* By Messrs. Thurgood and Giles, July, 1871. The sarcophagus was of sycamore-wood, and probably dated from the nineteenth dynasty.

† See Naville, *Texte de la Mythe d'Horus*, for fuller details.

Museum ; another as fine in hard wood was formerly in the Hay collection, and has lately gone to Boston, in the United States. A variety of these cippi, at that time supposed by Denon, Wilkinson, and others to be astronomical, are engraved in the "Mémoires" accompanying the *Description de l'Egypt* (fig. 108) ; and the discoveries of later Egyptologists have

Fig. 108. Talismanic sbrine of Horus, the stopper of snakes. On one side stands the staff and quadrangular feathers of the deity Atum, the god of darkness, and on the other the papyrus, staff, and hawk of Horus-Ra. In the centre stands Horus himself, treading upon the heads of two crocodiles, emblems of typhonic power, and in either hand he holds snakes and savage beasts, as restraining their violence. Above him is the head of Set or Baal, whose superhuman power Horus is supposed to have assumed. The usual long lock of hair (accidentally reversed by the artist) hangs over the left shoulder of the deity. (Denon, *Description de l'Egypte*.)

proven, beyond all doubt, from the hieroglyphics themselves, that these objects were universally adopted in ancient Egypt as preservatives against the attacks of all venomous or dan-



Fig. 109. Porcelain amulet (exact size). The snake Nuhab making an offering of wine to the gods.

gerous reptiles by the benevolent protection of Horus, and were even by the Gnostic Christians dedicated to Jehovah as the

God IAO.* Sometimes miniature copies of these cippi were manufactured in blue porcelain, and were hung as amulets around the necks of children, as was also a less common figure



Fig. 110. Porcelain amulet (exact size). Horus the snake-headed. (Hay collection.)

of the god Horus (fig. 109) wearing a serpent's head (fig. 110),† and the talismanic figures of the serpent of Ranno (fig. 111).

Fig. 111. Amulet (exact size). Horus, as a hawk-headed uræus, wearing the solar disk.

In fact there was, the papyrus only excepted, scarcely any object so frequently used, or represented, either as an emblem of good or evil, as the snake, in its three great varieties,

* Montfaucon, tom. ii. planche 370.

† Horus being also mystically identified with the Good Serpent Agathademon.—Wilkinson, v. 398.

or rather genera, of Coluber, Naja, and Asp (fig. 6, etc.). The ancient writers gravely asserted that the sand of the

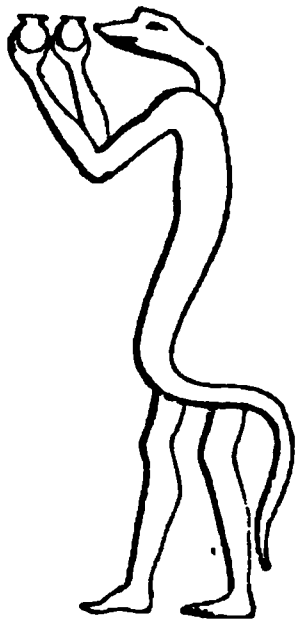


Fig. 112. Nahab, or Nahab-ka, as in fig. 109.

Theban desert spontaneously generated these dangerous reptiles;* and it would seem as if the whole of the Theban mythology were buried in the cockatrice den, or written upon the skin of a snake.

41. A peculiar malignity, according to the Egyptians, attached itself to a serpent's bite, for not only was it fatal to the living, but the dead themselves became obnoxious to its influence. The pure spirit of the Eternal could not inhabit a body

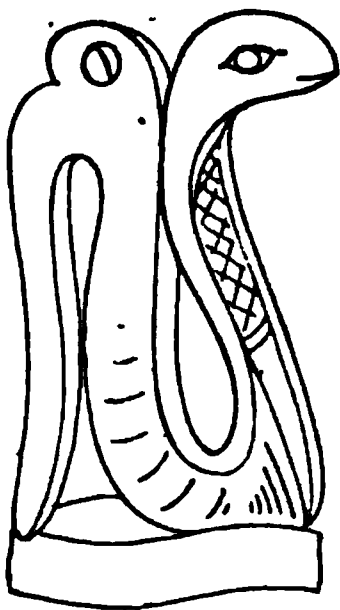


Fig. 113. Steatite amulet (exact size). The goddess Mersokar. (Hay collection.)

infected with the venom of a snake or scorpion.† Hence the mummies of the deceased were protected from ophite injury by

* Diodorus Siculus, lib. i. cap. i.

† *Ritual*, caps. xxxv. and xli.

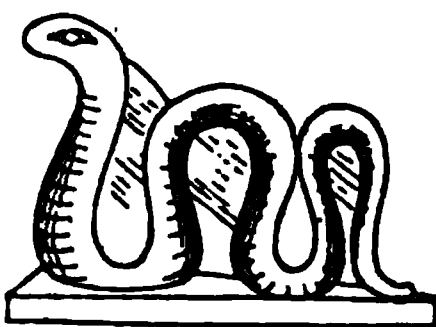


Fig. 114. Porcelain amulet (exact size). The goddess Ranno. (Hay collection.)

charms, talismans, and incantations (figs. 113, 114). Some of these, of the Greco-Egyptian or Ptolemaic period, have been

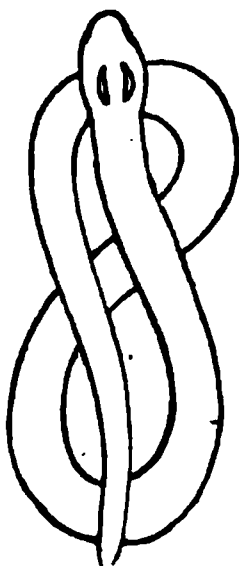


Fig. 115. Wooden amulet for domestic use. Same deity. (Loemans.)

preserved to the present time (fig. 115). The highly symbolical nature of the figures depicted, and mythical character of the words employed, render them exceedingly difficult of interpretation ; not to mention the circumstance that in many instances the papyri and tablets have been wilfully defaced, or broken asunder by later sectaries. One of them, engraved by Sharpe, in the *Egyptian Inscriptions*,* has been in part translated by M. Chabas,† and appears to contain, in the first section, a series of directions or rubrics to the mourners or embalmers. After these follows the charm itself, being an adjuration against the serpent's enemies, both in this earth and Amenti, addressed to Horus, the protector of the dead.

“O sheep, son of a sheep, lamb, son of a sheep, who suckest the milk of thy mother the sheep, do not let the defunct be bitten by any serpent, male or female, by any scorpion or any reptile ; do not let any one of them possess [have the mastery] over his limbs. Do not let him be penetrated [or possessed] by any male or female dead ; may no shade of any spirit haunt him, may the mouth of the serpent Ham-ha-hu-f have no power over him.” (Figs. 116, 117.)

* *Egyptian Inscriptions*, fol. 1837, plates 9-12.

† *Bulletin Archéologique*, p. 44, Juin, 1855.

Here the allusions, both to the serpent enemies of the soul and the possibility of the body of one man being interpenetrated by the soul of another, and that an evil one,—the doctrine of the Pistis Sophia of the Gnostics, are theologically exceedingly valuable.



Fig. 116. The serpent germinating. A pictorial representation of a phrase used in the Magical Papyri. (See Birch, "Sur un Papyrus Magique," *Revue Archéologique*.)

trated by the soul of another, and that an evil one,—the doctrine of the Pistis Sophia of the Gnostics, are theologically exceedingly valuable.

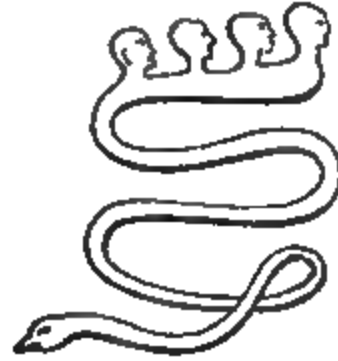


Fig. 117. The four-headed uræus. Another of the ideographic snakes drawn in the Magical Papyri.

Fig. 118. Bronze coin of the Emperor Hadrian, struck at Alexandria, showing the two opposing serpents of good and evil. (Sharpe.)



Fig. 119. A similar coin. The deity Jupiter Serapis, as the serpent of evil, carrying a basket upon his head. (Sharpe.)

42. It were at this stage of the inquiry too long and too modern a subject to trace the myth of the serpent, as the antago



Fig. 120. The serpent of evil riding on a horse, emblematic of the terrible rapidity of its progress. From a Gnostic coin. (Sharpe.)

nistic powers of good and evil,* through the subtleties of the Gnostic commentators (figs. 121, 122, 123, 124), and the heresy

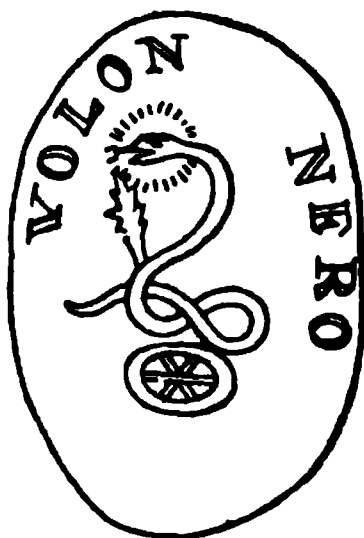


Fig. 121. The mystic serpent of the Gnostics, standing upon a wheel and holding a club. From a gem. (Montfaucon.) Compare the Chuktra and serpent of Buddhist mythology.†



Fig. 122. The serpent Chnuphis, spelled Chmoymem, with the seven-rayed crown, emblematic of the seven mystic potentialities. On one side is his name, on the other an emblem of the Gnostic trinity, and beneath him the petition Abraxas, i.e., "hurt me not" (?) (Montfaucon.)

* Among the magical emblems of the Egyptians was an uræus on a wheel. The creature is called Akhi Sesef, "the Turner of Destruction," "the Mistress of the Burning Wheel, who lives off [by devouring] impurity."—Birch, *Magic Papyrus*.

† On the Egyptian coins of Hadrian, for example, where the two serpents and the heads respectively of Isis and Serapis represent the antagonistic powers, see Sharpe, *History of Egypt*, vol. ii. chap. 15. (Figs. 118, 119, 120.)



Fig. 123. A similar gem. Around the leonine head of the serpent are the uncial Greek characters composing his name.*



Fig. 124. Another similar gem, very late Roman. The inscription probably means "Abraxas, name of God,"—ABRESSES, NUMEN (for nomen) DAEI (for dei), miswritten by the ignorance of the Alexandrian seal-engraver. (Montfaucon.)

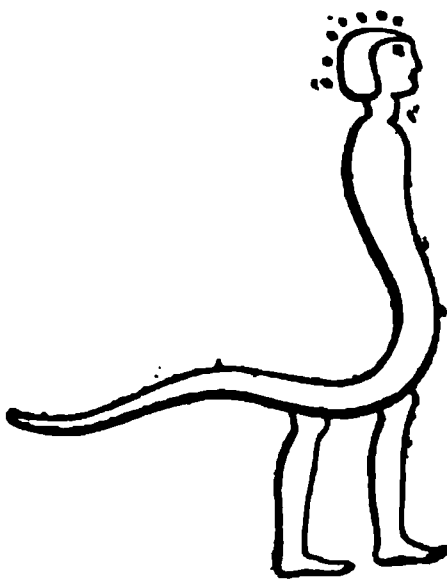


Fig. 125. Chnuphis walking crowned with seven stars (a form afterwards much used by the Gnostics. See fig. 97). (Denon.)

* "In the beginning, earth and water, to mud condensing, united. Afterwards a third principle was born, a serpent with the heads of a bull and a lion, and in the midst the face of a god; it had wings on its shoulders, and was called *Χρόνος ἀγῆπατος*."—*Teste* Hellanicus, quoted in Creuzer's *Symbolik*, pp. 81–4. See also King, C. W., *The Gnostics and their Remains*, plates v. and vii.

of Basilius into the Christian religion (fig. 125). It was as if the giant Apophis, of Egypt, in dying under the spear of Alexandrian Christianity, infected its destroyer with its envenomed breath, and poisoned whom it could not over-



Fig. 126. A very curious Greco-Egyptian Gnostic seal (considerably enlarged). Christ with the attributes of Horus, treading upon the crocodile of evil, and holding the sacred symbol of his name, a fish, *ἰχθυς*, i.e. *Ἰησοῦς Χριστός Θεοῦ Υἱὸς Σωτήρ* (Jesus Christ, the Son of God, the Saviour). This gem is peculiarly valuable, as showing how easily the Alexandrian Christians introduced their ancient emblems and their corresponding theories into the rising Christianity of Egypt. (From the collection in the British Museum.)

power* (fig. 126). The subject is a wide, a grave, and a sacred one, and if studied at all must be reverently and unbiassedly studied. Close we the story of Egyptian Ophiolatry here, and in as few words as may be compatible with the lateness of the hour, and the extent of the materials, summarize the results of this imperfect examination.

43. I. That in the Egyptian mythology, the oldest which, apart from the Bible, has been handed down to us, and is clearly

(Note on some of the preceding names of serpents.)

* Abraxas אַבְרַחַס fallen spirit (?) Ab-rabak. From Ezekiel i. 15-16. Cabbala-Sohar gives אֹפַן Ophan (wheel) an order of Angels, as כְּרֻבִּים Krub (cherub). שָׂטָן (Satan) from שָׁט (shoot) wandering, Job i. 7; ii. 2. אֶפֶס Aph-aph,—anger, wrath (of God). אֶנָּף (Anaph), foaming with rage אֶנָּף Nose, inflated nostrils wing, Kanaph כָּנָף ?—S. M. Drach.

traceable for three thousand years B.C.,* there are preserved, along with others, though in a corrupted and exaggerated form, many of the great doctrines of revealed religion.

II. That, prominent above other myths in that religious system, was the belief in a monstrous *personal* evil being,† typically represented as a serpent, and whose office was to accuse the righteous, oppose the Supreme Deity, and devour the wicked.

III. That, co-existently in the order of time, there arose a dualistic principle of good, likewise represented, for scarcely intelligible reasons, by an entirely different serpent, and that between these two a constant spiritual warfare was maintained.‡

IV. That, in the abstract, both good and evil were directly produced by *one* Supreme Being, who also co-operated with the righteous in their endeavours after holiness.

V. That the doctrine of the Metempsychosis, and the dogmas of Purgatory, vicarious propitiation, a tangible Hades, Heaven and Hell, were also a part of the Egyptian Cultus.

VI. That negative and positive holiness, rewards and punishments, and conformity to the divine nature, were doctrines of the same theology.

VII. That the supreme delight of the justified consisted in *conscious* hypostatic union with the Eternal Being,§ which was attainable only after much purgation, and long-continued effort.

VIII. That the final punishment of the wicked consisted in utter annihilation, after a period of frightful torture in a fiery hell.

IX. That the contest between good and evil would be at last terminated by the incarnation of Deity overcoming the great serpent, and utterly destroying him.||

X. That besides all this, the serpent myths originated other symbolisms indirectly connected with the preceding dogmas, and that these, not being revealed by the priests to the general body of the people, were by them misunderstood.

* Lenormant, Bunsen, and Wilkinson.

† Satan שָׂטָן Sheitan, the hinderer, or from shoot שָׁטַח = שָׁטַח the wanderer (Job i. 7, and ii. 2).

‡ See also Plutarch, *De Iside*; and Bunsen, *Egypt's Place in Universal History*, vol. i. book i., for a fuller account of the Osiri-Typhonic myth.

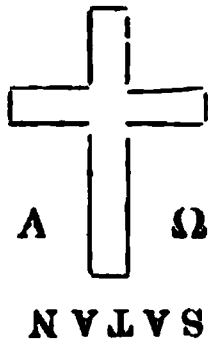
§ Differing herein essentially from the Nirwana or repose of Buddhism.

|| See also for a brief popular résumé of the principal of these doctrines, Keary, *Early Egyptian History*, pp. 364-409.

XI. That the principal corruptions of primitive Christianity arose from the Platonists and Gnostics of the Greco-Egyptian capital Alexandria,* in the same manner as their own ancient religion was originally derived from a purer source, *now only to be found in the Bible.*

XII. That the study of Egyptian mythology will throw more light upon the restrictive customs of the Jews,† the allusions of the prophets, and the early history of the Christian church, than that of any other country.

Thus then for a time we roll back the papyrus on which is inscribed the story of the serpent Apophis, ask we, Why the Father of Mankind has permitted these records to contain, amid so many errors, much to testify of prophetic and spiritual truth? Seek then the answer in the words of the Apostle of the Gentiles,‡ “God left not himself without witness in the world,” so that even by the light of nature, “all the world might become guilty before Him,” and might in the fulness of time be saved by His Son who is God over all, the victor over the great dragon, “that old serpent,” for ever—and evermore.



* Sharpe, *Egyptian Mythology and Egyptian Christianity*.

† See particularly Chabas, F., “Hebræo-Egyptiaca,” *Trans. Soc. Bib. Archaeology*, vol. i.; and Laüth, *Moses der Ebraeer*, 1868, which, although wrong in its conclusions, throws much light on early Jewish history.

‡ Acts xiv. 17.

APPENDIX.

It may interest Philologists to see all the names and significant epithets of the various serpents or serpent-formed Deities of Egypt in one list :—

NAMES OF APOPHIS.

Apap, Apepi, Apophis, Apopth, App, Baba, Bebon, Bth, Chf, Chof, Ho, Hof, Sba, Sutekh. .

NAMES OF THE SOUL OF THE WORLD.

Bai, Bait, Bat, Knum, Chnouphis, Chnumis.

NAMES OF OTHER SERPENTS.

Fenti, Gatfi, Ham, Har, Hu-ef, Mersokar, 'Mhn, Nfi, Nu, Ru, Ruhak, Tetbi, Urtuk, Urhapt? †

The vowels being in many cases wanting, the true etymology of these names cannot now be recovered.

ENGLISH TRANSLATIONS OF EPITHETS APPLIED IN THE RITUAL OF THE DEAD TO THE VARIOUS SERPENTS REFERRED TO.

Adversary (Bunsen).

Beast (Bunsen).

Breaker of the Wicked.

* Brass of Earth.

* Circling (Sar. Oimen.—epithet, 1st doorkeeper).

Clasper (Bunsen).

Consumer (Bunsen).

Destroyer (Bunsen).

* Devourer (Sar. Oimen., Apophis).

Enemy (Bunsen).

† All the feminine deities were, as before stated, either represented or were venerated under the form of uræi.—Birch.

Erector (Bunsen).

Fire-face (cap. 145—2nd hall).

* Fire in his Eye (Sar. Oimen.—8th doorkeeper).

Flame-face (cap. 145—5th hall).

Giant (Bunsen).

Great Clasper.

* Horn of the Earth (Sar. Oimen.—3rd doorkeeper of Amenti).

* Spark-face (Sar. Oimen.—7th doorkeeper of Amenti).

* Sparkling Face (Sar. Oimen.—7th doorkeeper of Amenti).

Spitter of Fire.

Stopper of the Rejected (cap. 145—7th hall).

Stone Head (cap. 145—6th hall).

The Great Destroyer.

* The Living (Sar. Oimen.).

The wicked, *Sba* (Bunsen).

For the names of the Snakes distinguished by an asterisk the author is indebted to the courtesy of the distinguished hieroglyphist Dr. S. Birch.

The CHAIRMAN.—I am sure that we all desire to return a cordial vote of thanks to Mr. Cooper for his able and interesting paper. (Cheers.)

Rev. J. JAMES.—I should like to ask Mr. Cooper one question : In what character is this Ritual of the Dead written—in hieroglyphic, hieratic or demotic ?

Mr. COOPER.—It is generally found in the hieroglyphic and hieratic characters. In the oldest papyri the writing is almost purely ideographic. The demotic script is very similar to the hieratic, but far less intelligible ; having more resemblance to an exceedingly bad school-boy's hand of the present time.

Mr. JAMES.—Do you mean that there are three characters of the same things—sometimes the hieroglyphic, sometimes the hieratic, and sometimes the demotic ?

Mr. COOPER.—Yes ; three styles of writing the same language prevailed throughout Egypt for four thousand years. The language was written in hieroglyphic and hieratic, or demotic, side by side, just as you might print the Prayer-book in black-letter and in italic or any other character.

Mr. JAMES.—Are there not several manuscripts of this liturgy ?

Mr. COOPER.—M. Le Page Renouf has enumerated and collated 272. Among them are, the copy of Leyden, which contains, I think, a hundred perfect chapters, and the copy of Turin, which contains a hundred and fifty chapters. But there are so many copies in existence that what is wanting in one is supplied in another, and in that way we get altogether the one hundred and sixty-six chapters of which the book is composed.

Rev. J. H. TITCOMB.—I should like to draw attention to what I may call a little bit of comparative mythology. We have been much in-

terested to-night in the serpent myths of Egypt. Some time since I read an account of the Scandinavian mythology, and almost the identical picture is there presented which we find in the 23rd section of this paper. The Scandinavian, like the Egyptian mythology, represented a lake with the evil spirit under the form of a serpent, and the gods in conflict with that serpent. Thor is in conflict with the serpent Midgar on a lake ; the serpent rises and nearly overturns the boat in which he is. The circumstance is interesting as showing how, apart from Egypt, in remote periods of time and in different portions of the globe, we have a reproduction of the same myth. It is an extraordinary piece of evidence of the unity of the human race, and of the common origin of these myths as drawn from one centre—the Word of God. With reference to the same subject of comparative mythology and serpent myths, it may be interesting to you for me to read an extract from a work by Squier, entitled *Serpent Symbol in America*. He gives a remarkable account of one of the traditions of the Lenappi Indians, and describes a great conflict between Manabozho, the presiding genius of the tribe, and the Spirit of Evil represented as a large serpent. The words are as follows :—

“ One day, returning home from a long journey, Manabozho, the Great Teacher of the Alonquins, missed his cousin who lived with him. He called his name, but received no answer. He looked around on the sand for the track of his feet, and there for the first time discovered the trail of the great serpent, Meshekenabek, the Spirit of Evil. Then he knew that his cousin had been seized by his great enemy. He armed himself and followed on his track ; passed the great river ; crossed over mountains to the shores of the deep lake where he dwelt. The bottom of the lake was filled with evil spirits, his attendants and companions. In the centre of them he saw Meshekenabek himself, coiling his volumes around his hapless cousin. His head was red as with blood, and his eyes glowed like fire. Manabozho looked on this and vowed vengeance. He directed the clouds to disappear from the heavens, the winds to be still, and the air to become stagnant over the lake, and bade the sun to shine on it fiercely, in order that his enemy might be drawn forth from the cool shadows of the trees. By-and-by the water became troubled, and bubbles rose to the surface, for the rays of the sun penetrated to the horrible brood within its depths. The commotion increased, and the hot waves dashed wildly against the rocks on its shore. Soon Meshekenabek, the great serpent, emerged slowly to the surface and moved towards the shore. Manabozho, who had transformed himself into the stump of a tree, then silently drew an arrow from his quiver and aimed at the heart of his enemy. The howl of the monster shook the mountains, for he was mortally wounded.”

This is an instance gained in another and still more distant part of the world, among the rude tribes of North America, where the serpent myth crops up in a way that one would least expect, and in a manner analogous to that of Egypt. Here is a copy of a picture of the Judgment-hall of Osiris from the very papyrus of which Mr. Cooper has been speaking—that at Turin ; but instead of explaining it myself, I shall ask him to do so for you.

MR. COOPER. — This picture, which Mr. Titcomb has so kindly brought with him, is copied from a well-known vignette in the Ritual of the Dead, but it differs from some that I have seen. Generally speaking, these illustrations have an altar with the four gods of the dead upon it, because the deceased entreats those four gods to intercede for him; but this papyrus is better and more accurate. You have not the four gods of the dead here, but in their place is Horus, the son of God himself, who intercedes standing in a reverential attitude with his hands put together, praying that his father Osiris may save the deceased, pardon, and admit him to the abodes of the blessed. Horus stands between the deceased and hell, here represented as a temple filled with fire, and over hell sits the monster Typho, "the devourer of the souls of the unjustified"; between hell and the judge is an altar containing fruit and flowers, supposed to have been offered by the deceased, when alive, to Horus, who now offers his mediation for the deceased. By the steel-yard is represented a monkey the emblem of justice, because all his ties are hands, and all are one scale is the goddess of truth in the other is a little vase the heart of the deceased. If in weight, the deceased is acquitted, if not, he is condemned. The deceased stands between the goddesses Isis and Nephtys, and he bows before the judge, with one hand on his breast, while the other shrouds his face, for it is necessary, in standing before a god, or in praying to the Serpent, to put the hand before the face. The figure of Thoth is seen



THE JUDGMENT HALL OF OSIRIS.

writing down the good deeds of the deceased, and the result of his acquittal or condemnation. I am much obliged to Mr. Titcomb for bringing this picture.

Mr. I. T. PRICHARD.—I cannot throw much light upon the subject, but having been in India, may be able to give a little evidence from modern times in reference to the very peculiar veneration that the natives of India have for serpents, even the most venomous. The kind of cobra that Mr. Cooper has mentioned is very common in India, and even the most venomous serpents that we find occasionally in the gardens or in the houses it is impossible to get any of the natives of the lower classes to touch. They will not kill them, but are desperately afraid of them, because a bite is generally death, though with proper measures life can be saved. I have often inquired the reason, but they never give any—they merely say it is against their religion. They have some religious objection against injuring these creatures, and it would certainly seem as if some kind of tradition had been handed down from early times that these reptiles had a sort of sanctity about them, and hence the people are afraid of touching them, even in self-defence. I speak from the experience of very recent years.

Mr. COOPER.—The common Egyptians likewise never touched the serpent: they had too much reverence for it. They always carried it in an ark borne by four priests, and only occasionally exhibited it to the vulgar eye.

Rev. S. WAINWRIGHT, D.D.—I presume that paragraph 4, section 43, is to be regarded as only giving the result of Mr. Cooper's inquiries in Egyptian Mythology apart from the Bible, because it refers to a point which neither he nor we recognize as belonging to Revealed Religion—I allude to the words, "In the abstract, both good and evil were directly produced by *one* Supreme Being." Another point I wish to mention is that to which Mr. Titcomb referred—the Scandinavian Mythology, to show that there too, there was an account of a boat on a lake—it occurred to me to suggest that perhaps that idea of the boat which we find existing in lands so far remote, may be a sort of floating tradition of the ark.

Mr. COOPER.—In common with all the Hamitic races, there is no flood tradition in Egypt.*

* There is no quarter of the globe where modern discovery can play a more important part than in Africa, as comparatively little is known about it. In regard to Mr. Cooper's statement, I find a well-known modern writer on geology says,—“There seems to exist no such definite outline of the Egyptian tradition referred to by Josephus as that preserved of the Chaldean one. Even in Egypt, however, the recollection of the Deluge seems to have survived, though it lay entangled amid what seem to be symbolized memories of unusual floodings of the river Nile.” The “Noah of Egypt,” says Professor Hitchcock, “appears to have been Osiris, and it is a curious fact that he embarked on the 17th day of the month Athyr, the very day, most probably, when Noah entered the ark.” I may add that, as regards the Chaldean account of the flood, Mr. G. Smith has recently found the fragments of an Assyrian tablet from Nineveh, in the British Museum; the inscription,

Dr. WAINWRIGHT.—Well, there are two more points on which I should be glad to have information. We know that certain classes of serpents are poisonous, and I should like to know if such are found in a fossil state ; also, if the Egyptians always represented serpents as cumbent.

Mr. COOPER.—The deductions given towards the close of my paper are deductions from the mythology of Egypt, and my own faith winds up the last paragraph, which I believe to be orthodox. As to fossil serpents being venomous or non-venomous I do not know how that may be borne out ; I believe that they were not venomous. The Serpent of Good is always represented by the Egyptians as upright, and the Serpent of Evil as crawling, and that is generally the only distinction which they make.

Rev. G. HENSLOW.—Fossil serpents are very rare ; geologists know very little about them ; but in the Eocene clay snakes have been found, which Professor Owen considers as probably frequenting water.

Mr. COOPER.—The water-snake is never represented in Egypt.

Mr. HENSLOW.—There is a snake-like form of animal among the Assyrian monuments.

Mr. COOPER.—It is an emblem of Hea, the Assyrian water deity. With respect to the eel, the Egyptians knew of it, but they dedicated it to the God of Darkness. As to the boat, there is quite evidence enough about the character of the mystic bark of the sun—the Divine Baris—without troubling ourselves about it in this case. The Nile was the great highway of the Egyptians, and it is natural enough to represent the sun as travelling by water—the only road he could travel by ; more especially as they believed, with the early Pelasgians mentioned by Herodotus, that the world was entirely surrounded by an impassable ocean in which the deities sailed and beyond which they resided, a theory which has an Indian analogue in the cosmos of the Buddhists, and, if I mistake not, is also preserved in the Eddas of the Scandinavian nations. If they had travelled as the Assyrians did, by land, they would have represented the sun as walking, or have put him, as other nations did, on the backs of horses—as for instance the Greeks, who put Phaëton in his *quadriga*.

Rev. C. A. Row.—From the book called “The Ritual of the Dead,” do you conclude that the Egyptian theology was of an exclusively pantheistic character ? I want to know whether the idea of deity involved freedom of will, or fate—whether it conceived of him, or not, as a living person ? Also,

which is in Semitic Babylonian, was copied B.C. 660 from a Chaldean document at Erech, at least as old as the 17th century B.C., and contains many of the events of the flood, but given in a legendary style, and with certain minor differences, which show that it embodies a distinct and independent tradition belonging to distinct peoples. Mr. G. Smith, when reading a paper on this inscription before the Society of Biblical Archæology, in November, 1872, remarked on the value of the histories that are stored in the mounds and ruined cities now buried in the plains of Chaldea, once the cradle of civilization.—[ED.]

what are the ideas of the soul ; whether immortality was regarded as more or less involving a personal existence ?

Mr. COOPER.—First of all, the Supreme Deity of the Egyptians was Ammon-Ra, the spiritual author of all existence, physical, moral, and everything else. But that was too abstract an idea for the people to grasp, especially those of Lower Egypt. Therefore the priests typified all the attributes of deity, and thus came near to the Persian system ; but for all this they never lost sight of one Supreme Being, while the people invariably did, and that is the great distinction between them. As would naturally follow from such a system, they were not distinct about their deities ; one man would worship a god under the form of Sate, while another would worship the same god under the name of Isis, and another under that of Nephtys. They had triads of gods,—a male, female, and a child ; but they were not all the same triads, though all were more or less symbolized or crowned by serpents. All the goddesses were serpents ; there is no evidence to suppose that the Supreme Being was ever lost sight of by those who knew the esoteric meaning of the Egyptian faith. As to the soul, it was a distinct personality, separate from the body, emanating from the Supreme Being ; it had to answer for its misdoings, and if, at the death of the body, it was not good enough, it had to come back to earth to be purged. But if it were good, it would go in a condition of extreme happiness into the presence of God, and assume the character of one or other of the inferior divinities for an *æon* ; but then it would come back to earth, lose all its consciousness of existence, and become the soul of somebody else. But it could not inhabit any other body without the permission of the Supreme Being, and if it found its original body all crumbled to pieces, or if another spirit had by some evil means possessed it, the unhappy soul would have to float about like the disembodied ghosts in Virgil. For this reason people were very anxious for the preservation of their bodies after death. But it was believed that in some rare instances, where the original body was completely destroyed, the Supreme Being gave the soul permission to inhabit some other body. In the time of the Ptolemies it was thought to be possible that the soul and body might mistake each other at the resurrection to life, and hence arises much of the beautiful Platonic myths of Eros and Psyche. The resurrection of all men was not held by them as by us : they believed that all men would be judged, but not all at the same time.

Mr. ROW.—How far is the pantheon of Egypt allied to the pantheon of India ?

Mr. COOPER.—At present nobody can definitely tell us that. We have some material as to the ancient religion of hither India in the pre-Bhuddist period, and there is a great similarity between that and the Egyptian, but we cannot dogmatize on the subject. The Egyptian mythology was perfect at least 4,000 years before Christ, and all we can say is that everything in the Indian mythology meets its analogue in the Egyptian mythology. When the Semitic people came across with Rameses from India

and conquered the aboriginal races, they introduced much of their own cultus, but they also adopted Egyptian forms, the result being a very great change indeed ; and it is possible that the Ramesidæ may have introduced an Indian mythology with them, or, at all events, have explained Turanian myths by Semitic theories.

Mr. Row.—Was the Egyptian theology a personification of the powers of nature ?

Mr. COOPER.—No ; but that the theurgia of a Supreme Being manifested in the powers of nature.

Mr. Row.—But was it not simply a personification of the powers of nature ?

Mr. COOPER.—By no means. [Mr. Cooper here drew upon the black board representations of the head of an ancient Egyptian, and of the head of one of the men of the Rameside period, to show the degeneration in the physiological character of the races. He then proceeded to say :] It was an Indo-Germanic race that conquered Egypt in the time of the Rameses, and made great improvements. All the remains of Egypt, except the pyramids and one or two imperfect tombs, belong to that race. There was also another conquering race of a different or Arabian type, whose influence again modified the Egyptian cultus, but it has left very few evidences. They seem to have possessed no literature, and no evidence of their sway remained except the extreme hatred that every Egyptian bore to the shepherd or Hykshos rulers.

Rev. T. M. GORMAN.—I should like to ask one question which seems to have an important bearing on the *rationale* of this curious and difficult subject. In the paper just read reference has been made to the idea of a spiritual Supreme Being as known to the most ancient Egyptians. Can Egyptologists throw any light on the *origin* of this idea ? It would be a point of great interest to show that the idea was derived, not from the fancy, or even the reason of this originally grave and thoughtful people, but from the primeval Revelation. It appears to me that the real and lasting value of researches such as these depends materially upon the solution of questions like that here proposed. If carefully and patiently worked out, considerable light might be thrown on the true character and purport of Egyptian symbolism, a subject full of interest for the Christian student of ancient lore. As an illustration of what is meant, may be mentioned the adoption of the serpent, by the Egyptians, for an emblem of evil, as opening up one of the most difficult questions in theology. The study of this and kindred subjects brings before us a fact which deserves our best consideration in these days ; namely, the power and depth of the thinking faculty as evinced by the nations of the Old World in the records that have been preserved of their national life. Upwards of twenty centuries ago the Egyptians had fallen away from their pristine enlightenment. Their state is described in the inspired words of the Hebrew prophet :—“The princes of Zoan are fools, the counsel of the wise counsellors of Pharaoh is become brutish.” It was not so in the old time. We learn on the same authority that Egypt

was once called "the son of the wise, the son of the kings of antiquity." Were it possible to arrive at the primal source of the knowledge possessed by the Egyptians of the Supreme Deity, as a spiritual creator and governor, something perhaps might be done in the way of solving another difficult problem—the separation of what is genuine from what is spurious in Egyptian mythology. It might thus be possible to distinguish, more clearly than has yet been done, the truth—of which the symbol is the expression—from the fable by which, in the lapse of ages, that truth has been overgrown and well-nigh lost to view. By working assiduously in the same direction it might be possible to lessen in some degree the confusion of truth and myth which at present exists in the older Greek and Roman mythology. For here also have been preserved some remnants of a true symbolism. To discover, then, the source of that spiritual idea of the Deity which once prevailed among this ancient and peculiar people, would, it seems to me, impart a new and living interest to researches such as those on which the instructive paper of this evening is based, and place students of Egyptology in a much more advantageous position for estimating the true value of results arrived at in this branch of learning. The acute remark of a well-informed writer on the subject well deserves to be borne in mind in the present connection :—"The Egyptians are not the only people who have converted type into substance, or adopted in a literal sense the metaphorical symbols of faith."

MR. COOPER.—The book that contains the answer to that question is very abstruse and difficult to understand, because it is written in purely ideographic symbolism. It is the book of the Manifestations, or Liturgy of the Sun, and has been published by M. Ohabas. We cannot obtain much from it otherwise than that the abstract sense of Deity is represented by the first of all symbols—fire ; by light, and air, and by everything beautiful. There is a passage that implies that the Deity is holiness also.

REV. C. GRAHAM.—With regard to the mythology of Greece and Rome, you will find that it illustrates many of the great facts in the Book of Genesis. Of course it does so in a corrupted form ; but nevertheless those facts are illustrated, and I would venture to say that they are derived from Egyptian mythology. In Genesis we are told most distinctly that a serpent induced Eve to eat of the forbidden fruit. Now in the Greek and Roman mythology we have the Garden of the Hesperides, supposed to be just on the borders of Ethiopia. We have a serpent coiled round the tree defending the golden apples, and Atlas surrounding the gardens with mountains in order to prevent the fulfilment of an ancient prophecy that the son of a god would at length destroy the serpent and take off the apples. Another fact recorded in Genesis is, that the seed of the woman was to bruise the head of the serpent. Now in mythology we have that great truth also transmitted. We have, for instance, Hercules destroying the serpent with his club, according to Apollonius ; and according to Ovid and others, we have Apollo destroying the Python with his arrows. These facts, which lie at

the foundation of our religion, are distinctly transmitted from classic mythology, and in all probability they passed from Egypt to Greece and Rome. With regard to the word Hesperides itself, many learned men derive it from the Hebrew word *ets peri*—a tree of fruit. The serpent, according to Apollonius, is called Ladon, which learned men derive from *El Adon*, the God of Eden, attributing to the serpent divine power, and making it a god. These matters are important. I do not know whether Mr. Cooper would tell us that the mythology of Greece and Rome was mainly derived from an Egyptian source.

MR. COOPER.—Oh no, not in your sense. No doubt Egypt is the mother of those mythologies, but she has very bad daughters.

MR. GRAHAM.—Just so. But in these cases the mythology of Greece and Rome is more distinct and illustrative, even than that of ancient Egypt. The great facts of the Fall and of the Redemption come out most distinctly in the mythology of Greece and Rome.

MR. COOPER.—Far less so as matters of doctrine, to my belief, than they do in Egypt; the great distinction between physical and moral evil, and the sense of human responsibility prevailing far more largely in the Egyptian faith than it did either in Hellene or Latin theology. Plato doubted of what God was made, and Pliny doubted if there were a Supreme Deity at all. The great men were philosophical sensualists, and the people unreflecting fetichists.

MR. J. ALLEN.—You spoke of the Egyptian mythology being perfect 4,000 years before Christ. I suppose you mean according to the chronology of the Egyptians themselves.

MR. COOPER.—Chronologists differ very much. There are those who, like Sharpe, fix the initial date at about 2,200 before Christ, and others, like Bunsen and Lenormant, who throw it back to 5,000 years; but those are mere theories until we get more astronomical facts. We have got some astronomical facts however;—in the reign of Rameses III. eclipses and stellar phenomena are recorded at the temple of Medinet Habou, which, some say, could only have occurred 4,000 or 5,000 years ago. But then a great deal depends upon how far the inscriptions can be chronologically arranged. With regard to the Bible, the Pentateuch is full of Egypt. I think that it was written in the Egyptian alphabet, for a people saturated with the symbolism and the culture of Egypt; and I consider that the Hebrew characters did not exist at that time, or for centuries afterwards. If this be so, when Moses wrote the early sacred books the writing must have been ideographic or in pictorial hieroglyphic characters; and in all probability he followed out the plan of the Egyptians, conveying partly by symbols, partly by signs, and partly by a mixture of both, the doctrines which were afterwards put into good Hebrew by Ezra and the later priests.* That does not

* The *present* Hebrew character was introduced to the Jews from Chaldaea, probably about the time of the Babylonian captivity; but that is no reason

impugn the truth of the Bible at all ; but though, as a book, it may be in some respects comparatively modern, the doctrines of the Bible are coeval with the origin of the human race itself, and could only have been made known by divine revelation. We have proved that book to be absolutely true in matters of history ;* and I believe we shall prove it to be absolutely true in matters of theology also ; but that must be done by different persons. If you take a circle, and all men travel in direct lines from its circumference, they will all converge in a common centre. That centre in this case is orthodoxy—any divergence from it is only apparent, not real. (Cheers.)

Dr. WAINWRIGHT.—It has been shown by Professor Donald that in the time of Moses Hebrew was already a language, and had attained a certain stage of consolidation ; as is shown by the fossilized character of certain of its elements. There are interesting indications of the extreme antiquity of the language, which show that in the time of Moses it had such an antiquity as to possess other previous stages corresponding to the earlier stages of our own language in the time of Chaucer.

Mr. COOPER.—That is a matter of text, and the oldest copy of the Hebrew Bible in England dates from about the eighth century ; my authority is Professor Lenormant—indeed, we have no copy of any writing in Greek, Latin, or Hebrew so old as the time of our Lord, but we have Egyptian inscriptions that can be traced up certainly to 2,000 or 3,000 years before Christ. I do not now allude to incised inscriptions.† It is a curious fact that, as far as written testimony goes, we have none earlier than the Christian era, except the Egyptian papyri and the Assyrian magical

for assuming that the language had not an archaic character of its own, or that Moses wrote in the ideographic Egyptian. The Moabite stone, 900 B.C., recently discovered (*see* p. 125), is written in pure Hebrew, but in the ancient Phœnician character ; in which character, most probably, the Pentateuch itself was written—(J. H. T.) Dr. Espin remarks (*Speakers' Commentary*, vol. ii. p. 11),—"Archaisms, found in the writings of Moses, are not found in the book of Joshua, and there are traces in the latter that the language had somewhat developed itself in the interval."—[Ed.]

* There are some remarkable instances of this given in the Transactions of the "Palestine Exploration Fund" for 1872, which are now added to the Institute's Library. [Ed.]

† Since this discussion, Mr. Ganneau has mentioned, as regards ancient Hebrew inscriptions, that "up to this time the texts found in Palestine and Jerusalem are few in number and of small importance : amongst them are two Hebrew texts in Phœnician character discovered at Siloam. Two Hebrew cachets in Phœnician characters give the Biblical names of Ananias, Azarias, and Achbor. These four texts belong to the time of the kings of Judah ; also several inscriptions in square Hebrew." To these I may add the seal of Haggai (520 B.C.), the authenticity of which is, however, not yet admitted by all, and the Moabite stone. A curious remark is made by Josephus, *Antiq.*, xii. ii. 1 ; it is that Demetrius Phalerius, library-keeper to Ptolemy Philadelphus (277 B.C.), spoke of the Hebrew as "similar in sound and character to the language proper to the Syrians."—[Ed.]

pottery, I see there is a Hebrew scholar present who will perhaps say a few words on the subject.

Mr. S. M. DRACH.—Doctors and Rabbis say that every copy, of the Pentateuch especially, is a reproduction with the greatest minuteness of the original one, supposed to have been written by Moses himself. The Rabbis say that the Pentateuch was originally written in characters generally known as Hebrew or Samaritan, but it is generally allowed that Moses wrote the Pentateuch in alphabetical writing, and there is a great distinction between that and hieroglyphic writing. If we were to adopt Mr. Cooper's idea, and only go upon written testimony, we might well doubt that Homer's writings were written by Homer. Although it is the orthodox Jewish belief that the writings of the Old Testament were in the original language of mankind, yet I must dissent from that. There are a good many synonyms and Jewish words which are perhaps derived from an Indo-Germanic root ; so that the Hebrew of the Pentateuch and of the Old Testament generally is something like the English language, which is formed partly of Latin and partly of Anglo-Saxon ; or like the Spanish, which is partly Latin and partly Arabic ; and not a pure language, such as the German. *Vide David Kimchi on Synonyms, "Sh'met Nirdafim."* (12th century.)

The discussion then closed.

ALTERATION OF THE RULES OF THE INSTITUTE.

The CHAIRMAN then announced that, in accordance with a notice issued on 1st of November, the Meeting would be made Special, for the purpose of considering the suggestion of the Council, copies of which had been sent to all ; namely, that the list of 1st Class Associates should be amalgamated with that of the members.

Resolutions to this effect having been passed *nem. con.*, the Council were authorized to make the requisite alterations in the Bye Laws.

The Meeting was then adjourned.

NOTE ON THE HEBREW ALPHABET AND VOWEL POINTS.

By the Rev. C. GRAHAM.

Gesenius remarks, that "However dissimilar the Shemitish written characters may now appear, they have undoubtedly all come, by various modifications, from one and the same original alphabet, of which the truest copy now extant is the Phœnician, from which also the Ancient Greek, and through it, all other European characters, were derived." Of the Hebrew letters now in use, called the *Assyrian* or *Square* character, in which the manuscripts of the Old Testament are written, he says, "They are not of the original form. On the coins of the Maccabean Princes is found another character, which at an earlier period was probably in general use, and which bears a strong resemblance to the Samaritan and Phœnician letters. The square letter may also be traced back to the Phœnician; but it has most agreement with certain Aramæan inscriptions found in Egypt and at Palmyra."

Gesenius remarks, what one would think ought to be obvious to every one, that "the antiquity of the letters is clearly proved by the alphabetical poetic compositions in Ps. xxv., xxxiv., xxxvii., cxix.; Lam. i. to iv."

Again, he says, "Both the names and the order of the letters (with a trifling alteration) passed over from the Phœnician into the Greek, in which the letters, from Alpha to Tau, corresponded to the ancient alphabet."

"When the Hebrew ceased to be a spoken language, and the danger of losing the correct pronunciation. . . . continually increased, the *vowel-signs* or *points* were invented, which minutely settled what had previously been left uncertain."

"This vowel system," he says, "has, probably for its basis the pronunciation of the Jews of Palestine, and its consistency, as well as the analogy of the kindred languages, furnishes strong proof of its correctness, at least as a whole. Its authors have laboured to exhibit by signs the minute gradations of the vowel sounds, carefully making even half-vowels and helping sounds, spontaneously adopted in all languages, yet seldom expressed in writing."—See *Introduction to Gesenius's "Hebrew Grammar,"* from the *fourteenth German edition, enlarged and improved by Dr. E. Rödiger, translated by Dr. B. Davies.*

APPENDIX (A).

LIST OF THE
VICE-PATRONS, MEMBERS, ASSOCIATES,
AND LOCAL HONORARY SECRETARIES
OF
The Victoria Institute,
OR
Philosophical Society of Great Britain.

CORRECTED TO DECEMBER 31, 1872.

OFFICES:
8, ADELPHI TERRACE, STRAND, LONDON, W.C.

OFFICERS AND COUNCIL FOR 1872-73.

President.

THE RIGHT HON. THE EARL OF SHAFTESBURY, K.G.

Vice-Presidents.

PHILIP HENRY GOSSE, ESQ., F.R.S.
REV. WALTER MITCHELL, M.A.
*CHARLES BROOKE, ESQ., M.A., M.B., F.R.S., F.R.C.S., &c.
REV. ROBINSON THORNTON, D.D.

Honorary Foreign Correspondent.

CONSTANTIN DE TISCHENDORF, Th.D., Ph.D., D.C.L., LL.D.,
Prof. Bib. Paleo., Univ. Leipsic,

Honorary Treasurer.

WILLIAM NOWELL WEST, ESQ.

Honorary Secretary and Editor of the Journal,

CAPTAIN FRANCOIS W. H. PETRIE, F.R.S.L., &c.

Honorary Foreign Secretary.

EDWARD J. MORSEHEAD, ESQ., H.M.C.S.

Council.

ROBERT BAXTER, ESQ. (Trustee.)
REV. A. DE LA MARE, M.A.
REAR-ADMIRAL E. G. FISHBOURNE, R.N., C.B.
ROBERT N. FOWLER, ESQ., M.A., M.P. (Trustee.)
WILLIAM H. INCE, ESQ., F.L.S., F.R.M.S.
ALEXANDER M^cARTHUR, ESQ., F.R.G.S., F.A.S.L.
ALFRED V. NEWTON, ESQ., F.A.S.L.
WILLIAM M. ORD, ESQ., M.D.
WILLIAM VANNER, ESQ., F.R.M.S.
S. D. WADDY, ESQ., B.A., Barrister-at-Law.
ALFRED J. WOODHOUSE, ESQ., M.R.I., F.R.M.S.
REV. JAMES H. RIGG, D.D.
*REV. C. A. ROW, M.A.
*REV. J. H. TITCOMB, M.A.
J. A. FRASER, ESQ., M.D., I.G.H.
REV. G. HENSLOW, M.A., F.L.S.
*REV. CHARLES GRAHAM.
T. W. MASTERMAN, ESQ.
H. CADMAN JONES, ESQ., M.A.
REV. J. G. WOOD, M.A., F.L.S., &c.
REV. W. ARTHUR, D.D.
C. R. BREE, ESQ., M.D., F.Z.S.
I. T. PRICHARD, ESQ., F.S.S., Barrister-at-Law,

* Editorial Committee of Reference.

VICE-PATRONS.

ROBERT BAXTER, ESQ.

B. BOND CABBELL, ESQ., M.A., F.R.S., &c. &c.

A. McARTHUR, ESQ., F.R.G.S.

SAMUEL MORLEY, ESQ., M.P.

H. W. PEEK, ESQ., M.P., J.P.

* * The Qualification of a Vice-Patron is a Contribution of not less than Sixty Guineas to the Funds of the Institute.

The Members and Associates included in the original Foundation List, closed December 31, 1866, are distinguished by an *£*; the dates of election are prefixed to the names of those since elected.

M E M B E R S.

(*Members of Council* *. *Life Members* †.)

‡ *Distinguishes those who have contributed Papers to the Institute.*

A.

1869.

Jan. 18. Allen, G. W. Esq. Solicitor, *Sydney, New South Wales* (83, *Coleman Street, E.C.*).

1869.

May 3. Allen, W. Shepherd, Esq. M.P. *Reform Club, S.W.* (*Woodhead Hall, Cheadle*).

£ Andrews, 'T. R. Esq. *Cleveland House, Wimbledon Park, S.W.*

1872.

Feb. 5. ARCHIBALD, 'THE HON. SIR T. D. (Puisne Justice of the Court of Queen's Bench), *Inglewood, Bickley, Kent*.

£ Armytage, Rev. J. N. Green, M.A. Cantab. *Dagmar House, Clevedon, Somerset*,


£ *Arthur, Rev. William, D.D., *Battersea Rise, Clapham Common, S.W.*


1872.

June 3. Ashley Hon. Evelyn, 16, *Cadogan Place, SW.*

1872.

June 1. Ashley Hon. W. St. James's Palace, S.W.


Aston, Rev. John A., M.A. Montpellier Grove, Cheltenham.


Auriol, Rev. Edward, M.A. Prebendary of St. Paul's, Rector of St. Dunstan's in the West, 35, Mecklenburg Square, W.C.

B.

1868.

May 4. Badenoch, Rev. George Roy, Memb. Gen. Council Glasgow Univ. 1, Whitehall Gardens, S.W.

1869.

Nov. 15. Bagster, H. Theodore, Esq. 15, Paternoster Row, and Junior Athenæum Club, Piccadilly, W.

1868.

June 15. Balmain, W. H. Esq. St. Helen's, Lancashire.


1869.


Feb. 15. Barker, John L. Esq. Homehill, Bowdon.


Barker, Rev. Matthias, M.A. Warden Lodge, Cheshunt.

1872.

Oct. 18. Barker, Thomas, Esq. Bramel Grange, near Stockport.


Barter, The Hon. Charles, B.C.L. Oxon. (Memb. of Legislative Council of Natal), The Start, Pietermaritzburg, Natal.


Bathurst, Rev. W. H., M.A. Lydney Park, Gloucestershire.

1872.

Feb. 5. Batten, James, Esq. Highfield, Bickley, Kent.


**†BAXTER, ROBERT, Esq. 10, Queen Square, Westminster, S.W. (TRUSTEE and VICE-PATRON.)*

1871.

June 19. Bayford, A. F. Esq. LL.D. (formerly Senior Registrar of the Court of Probate), Chancellor of the Diocese of Manchester, *Albury Heath, Guildford.*

1872

Feb. 19. Baynes W. Wilberforce, Esq. 48, *Moorgate Street, E.C.*

✠ Beaufort, Rev. D. A., M.A. 9, *Belmont Grove, Lee, S.E.*

1872.

March 18. Biden, Lewis, Esq. 9, *Victoria Chambers, Westminster, S.W.*; 21, *Lion Terrace, Portsea.*

✠ Blackwood, Rev. J. Stevenson, D.D. LL.D. *Middleton Tyas, Richmond, Yorkshire.*

1867.

Nov. 25. Bleby, Henry W. Esq. B.A. Lond. 48, *Isledon Road, Holloway, N.*

✠ Blomefield, Rev. Sir T. Eardley Wilmot, *Bart. M.A. Cantab. Incumbent of All Saints', Pontefract, Yorkshire.*

1872.

Oct. 18. Boutflower, The Venerable, S.P. M.A. Archdeacon and Canon of Carlisle, Proctor in Convocation, *The Abbey, Carlisle.*

✠ Boyce, Rev. W. B., F.R.G.S. 3, *Angel Terrace, Brixton, S.W.*

✠ Braithwaite, Charles Lloyd, Esq. *Kendal, Westmoreland.*

✠ † Braithwaite, Isaac, Esq. F.R.G.S. Assoc. I.N.A. 4, *Gloucester Square, Hyde Park, W.*

1871.

June 19. Brightwen, G. Esq. 8, *Finch Lane, London, E.C.*

1867.

Nov. 18. *†¶ Brooke, Charles, Esq. M.A. Cantab. F.R.S. F.R.C.S., V.P.R.M.S. and Surgeon to the Westminster Hospital, 16, *Fitzroy Square, W. (VICE-PRESIDENT.)*

1867.

Feb. 18. Browell, W. F. Esq. *Broadlands, Tunbridge Wells.*

 Brown, Robert, Esq. Solicitor and Registrar of County Court, *Barton-on-Humber.*


1869.

Jan. 18. Budgett, James S. Esq. *Ealing Park, Middlesex.*

 Budgett, W. H. Esq. *Redland House, Bristol.*

 Butler, Henry, Esq. H. M. Civ. Ser. *Bexley House, Blackheath, S.E.*

C.

 † CABELL, BENJAMIN BOND, Esq. M.A. F.R.S. V.P.R.I. F.R.S.L. M.R.A.S. V.P.Z.S. F.R.H.S. F.R.G.S. Bencher of the Middle Temple, J.P. and D.L. for Middlesex, &c. &c. 1, *Brick Court, Temple*; and 52, *Portland Place, W.* (VICE-PATRON.)

1871.

Feb. 6. Cadman, Rev. W., M.A. *Trinity Rectory, Albany Street, N.W.*

1871.

Aug. 9. CANTERBURY, HIS GRACE THE LORD ARCHBISHOP OF, D.D. F.R.S. &c. &c. &c. *Lambeth Palace, S.*; *Addington Park, Croydon, Surrey.*

 Carryer, S. Esq. *Parkfield House, Hartshill, Stoke-upon-Trent.*

1872.

July 15. CAVE, THE RIGHT HON. STEPHEN, M.P. 35, *Wilton Place, S.W.*

 Chance, Edward, Esq. J.P. *Lawnside, Malvern.*

1872.

May 6. CHESTER, THE RIGHT REVEREND THE LORD
BISHOP OF, D.D. *Dee Side, Chester.*

☞ Cheyne, R. R. Esq. F.R.C.S. Eng. 27, *Nottingham Pl. W.*

1872.

July 15. CLAUGHTON, THE RIGHT REV. BISHOP, D.D.
Archdeacon of London, 2, *Northwick Terrace,*
Maida Hill, N.W.

☞ Clegg, Thomas, Esq. Liberian Consul, Memb. Institut
d'Afrique, &c. *Cheetham Hill, Manchester.*

1871.

Dec. 4. Close, The Very Reverend F., D.D. Dean of Carlisle,
Deanery, Carlisle.

1872.

☞ Colebrook J., Esq., M.R.C.S. 15, *Hans Place, Chelsea,*
S.W.

☞ Conway, Rev. William, M.A. Canon of Westminster, and
Rector of St. Margaret's, Westminster, 17, *Dean's*
Yard, Westminster, S.W.

1872.

March 18. Cooke, Major General, C. J. 49, *Eastbourne Terrace,*
Hyde Park, W.

1871.

Oct. 24. † Coote, A. O. P. Esq. B.A. *Dungarvan House, Tun-*
bridge Wells.

1872.

July 15. Coxhead, Rev. J. J., M.A. Vicar of St. Johns's, Fitzroy
Square, 24, *Gordon Street, W.C.*

☞ Crawford, Lieut.-General R. Fitzgerald, R.A. *Sudbury*
Lodge, Middlesex.

1872.

July 15. Currey, Rev. G., D.D. *Cantab.* Master of the Charter-
house, *The Lodge, Charterhouse, E.C.*

D.

1871.

May 20. DARTMOUTH, THE RIGHT HONOURABLE THE EARL OF, 40, *Grosvenor Square, W.*; *Patshull, Wolverhampton.*

Ɔ Davis, Rev. Weston B., M.A. Principal of *Torquay Preparatory College, the College, Torquay.* (Loc. Hon. Sec.)

Ɔ ¶ Davison, Rev. M. *Fairview House, Downs Road, Clapton, E.*

1871.

March 6. † Day, William, Esq. *Westwood Park, Forest Hill, S.E.*

Ɔ ¶ * De La Mare, Rev. A., M.A. Cantab. *Rector of St. Thomas, Woolwich, S.E.*

1871.

Oct. 24. † Dick, W. Fitzwilliam, Esq. M.P. 20, *Curzon Street, W.*; *Carlton Club, S.W.*; *Hume Wood, Baltinglass, Co. Wicklow.*

1872.

July 15. Dodson, A. J., M.I.C.E. *Cambridge Park, Twickenham*; *Kurmool, M. I. & C. Co. Madras (care of Messrs. S. King & Co. 65, Cornhill, E.C.)*

1872.

Dec. 2. Drown, William Appleton, Esq. junr. *Philadelphia.*

Ɔ Duke, Rev. Edward, M.A. F.G.S. *Lake House, Salisbury.*

Ɔ Duncan, James, Esq. 6, *Aldermanbury Postern, E.C.*

Ɔ Duncan, William Aver, Esq. *Woodlands House, Red Hill.*

E.

1870.

Nov. 21. Edmond, Francis, Esq. Advocate, 5, *Albyn Place*, and
Kingswells, Aberdeen.

1871.

Oct. 24. Edwards, Rev. A. T., M.A. Rector of St. Philip's,
Kennington, 39, *Upper Kennington Lane, S.E.*

1872.

Feb. 19. † Edwards Owen, Esq. *Camden Wood, Okislehurst.*

J

Ellis, William Robert, Esq. M.A. Cantab. Barrister-at-
Law, 197, *Maida Vale, W.*

1872.

Oct. 18. Elliott, The Rev. E. B., M.A. Prebendary of Heytesbury,
St. Mark's Vicarage, Brighton.

F.

J

† Fairfax, John, Esq. (Proprietor of *Sydney Morning Herald*), *Sydney, New South Wales* (83, *Coleman Street, E.O.*).

1872.

Feb. 13. Falshaw, James, Esq. 26, *Castle Street, Edinburgh.*

1870.

Dec. 5. † Faulconer, R. S. Esq. *Clarence Road, Clapham Park, S.*

J

* Fishbourne, Rear-Admiral Edmund Gardiner, C.B. Vice-
President of the Royal United Service Institution,
2, *Duke Street, W.C.*

J

*† Fowler, Robert N. Esq. M.A. M.P. 50, *Cornhill, E.C.*
(TRUSTEE.)

J

* Fraser, James Alexander, Esq. M.D. Inspector-General
of Army Hospitals, 11, *Woodside, Victoria Road,*
Gipsy Hill, S.E.

G.

- § Gailey, Alexander, Esq., *Harengay Park, Hornsey, N.*
 § ¶ Garbett, Rev. Edward, M.A. Oxon. *Christ Church Par-
sonage, Surbiton Hill, S. W.*
 § Gell, Rev. John Philip, M.A. 63, *Ladbroke Grove,
Kensington Park, W.*
 § Glyn, Rev. Sir George L. Bart. M.A. Vicar of *Ewell,
Surrey.*

1868.

- Mar. 2. Goody, Edward C. Esq. *The Edge, near Meltham,
Huddersfield.*

1870.

- Feb. 7. Goren, James Newton, Esq. M.A. Cantab. (Senior Fellow
Queen's Coll. Camb.), Barrister-at-Law, 6, *Stone
Buildings, Lincoln's Inn, W.C.*

1871.

- Aug. 9. Gorman, Rev. T. M. 13, *Camden Grove, Kensington, W.*
 § ¶ * Gosse, Philip Henry, Esq. F.R.S. *Sandhurst, Torquay.*
(VICE-PRESIDENT.)

1867.

- June 17. ¶ * Graham, Rev. Charles, 1, *Belgrave Terrace, Shepherd's
Bush, W.*

1872.

- Feb. 19. Grenfell, Rev. Algernon S., M.A. Ball. Coll. Oxon.
Park Gate, Chester.
 § † Griffith, John, Esq. 6, *Hanover Terrace, Regent's Park,
N. W.*

H.

1871.

May 20. Haldane, Alexander, Esq. Barrister-at-Law, 118, *Westbourne Terrace, W.*

† Hall, J. Esq. 1, *New London Street, E.C.*

Halsted, Vice-Admiral Edward Pellew, 86, *Ebury Street, S.W.*

Hardwicke, Robert, Esq. F.L.S. 192, *Piccadilly, W.*

1871.

May 1. HARRIS, THE RIGHT HONOURABLE THE LORD. *Dec.*

Harrison, Gibbs Crawford, Esq. H.M. Civ. Serv. 222, *Marylebone Road, N.W.*

1871.

June 9. Harrison, J. W. Esq. 156, *Hampstead Road, N.W.*

1871.

May 1. HARROWBY, THE RIGHT HONOURABLE THE EARL OF, K.G. 39, *Grosvenor Square, W; Sandon Hall, Stone, Staffordshire.*

Haughton, Edward, Esq. M.D. Edin. M.R.C.S. Eng., A.B. T.C.D. *Grange Club, Guernsey.*

Healey, Elkanah, Esq. *Oakfield, Gateacre, Liverpool; and "Engineer" Office, Strand, W.C.*

1869.

Apl. 5. ¶* Henslow, Rev. George, M.A. F.L.S. F.G.S. F.C.P.S. 17, *Colville Terrace West, Notting Hill, W.*

1870.

Oct. 10. Hiles, Joseph, Esq. Mem. Liv. Geol. Soc. *Irene, Walmer Terrace, Victoria Road, Great Crosby, Liverpool, W.*

1871.

May 15. Hill, Rev. James, D.D. *Greenwich Hospital, S.E.*

1867.

Nov. 11. Hooley, William, Esq. Banker, *Mile End, Stockport.*

♣ Horton, Captain William, R.N. *United Service Club,
Pall Mall, S.W.*

1871.

Aug. 9. Houldsworth, James, Esq. 36, *Queen's Gate, W; Coltness,
Wishaw, Lanarkshire, N.B.*

1869.

Jan. 18. Howard, James, Esq. M.P. *Bedford.*

1872.

March 4. Howard, John Eliot, Esq., F.L.S. F.R.M.S. F.R.H.S.
Member of the Pharmaceutical Society, Member of
the Botanical Society of France, &c. *Lordship Lane,
Tottenham, N.*

♣ Hunt Thornton, Esq., 41, *Victoria Road, Kilburn, N.W.*

I.

♣ † Ince, Joseph, Esq. Assoc. K.C.L. M.R.I. F.L.S. F.G.S.
&c. 26, *St. George's Place, Hyde Park Corner,
S.W.*

♣ * Ince, William H. Esq. F.L.S. F.R.M.S. F.R.H.S. 27,
Thurloe Square, Brompton, S.W.

♣ ¶ Irons, Rev. William J., D.D. Oxon. Prebendary of St.
Paul's, Rector of St. Mary, Woolnoth, 20, *Gordon
Square, W.C.*

J.

1867.

Aug. 5. Jackson, John J. Esq. *Fern Cliff, St. John's Park,
Blackheath, S.E.*

1872.

July 31. Jacob, The Venerable Philip, M.A., Archdeacon and
Canon of Winchester, R.D. *Crawley, Winchester.*

✠ James, Rev. John, M.A. *Avington Rectory, Hungerford, Berks.*

1871.

March 6. Jardine, J., M.A. LL.D. B.L. University of France,
National Club, Whitehall, S.W.

✠ Jenkins, D. J. Esq. 61, *Marquis Road, Canonbury, N.*

1869.

June 21. Jenkins, Rev. E. E., M.A. *Southport.*

✠ Jepps, Charles Frederick, Esq. *Claremont Villas, Streatham Hill, S.*

✠ Johnson, Rev. Edward, 150, *Leadenhall Street, E.C.*
Oxton, near Birkenhead. (Loc. Hon. Sec.)

✠ Johnston, D. W. Esq. *Dalriada, Belfast.*

1868.

*Feb. 17.** Jones, H. Cadman, Esq. Barrister-at-Law, M.A. Cantab.
late Fellow Trin. Coll. Camb. 4, *Old Buildings, Lincoln's Inn, W.C.*

K.

1871.

✠ Kemble, Rev. Charles, M.A. Oxon. Prebendary of
Wells, Rector of Bath, *Vellore, Bath, Somerset.*

1869.

May 3. Kiell, George Middleton, Esq. 8, *Kensington Park Gardens, W.*

¶ Kirk, Rev. John, Professor of Practical Theology in the
Evangelical Union Academy at Glasgow, 17,
Greenhill Gardens, Edinburgh.

1872

July 15. Klein, William, Esq. 24, *Belsize Park, N.W*

1872.

April 1. Knapp, Rev. J., A.C.K. *St. John's Parsonage, Portsea.*
(Loc. Hon. Sec.)

L.

1869.

Sept. 20. Laird, John, Esq. M.P. 10, *Park Place, St. James's
Street, S.W.; and Birkenhead.*

¶ Lawrence, Lieut.-General Sir A. J., K.C.B. *Clapham
Common, S.W.*

1872.

July 15. Leaf, William, Esq. *Park Hill, Streatham Common,
S.W.*

1869.

May 3. * Learoyd, Nehemiah, Esq. 11, *South Street, Finsbury,
E.C.*

¶ Lewis, Joseph, Esq. R.N. *Stokes Hill Cottage, Cosham,
Hants.*

¶ Lidgett, George, Esq. B.A. Lond. 11, *Blackheath Terrace,
S.E.*

1869.

Feb. 1. Lindsay, James S. Esq. *Wheatfield, Belfast.*

¶ Lloyd, B. S. Esq 3, *George Yard, Lombard Street,
E.C.*

1871.

March 6. Lloyd, Charles, Esq. *Merton Lodge, Chiswick, W.*

1867.

Feb. 18. Lomas, Thomas, Esq. H.M. Civ. Serv. *Malvern House, Buxton, Derbyshire.*

1871.

May 1. LONDON, THE RIGHT HONOURABLE AND RIGHT REVEREND THE LORD BISHOP OF, D.D. *London House, St. James's Square, W.; Fulham Palace, S.W*

1872.

July 31. Long, the Venerable, C.M. M.A. Archdeacon of the East Riding of Yorkshire, Prebendary and Canon of York, R.D. *Settrington, York.*

£ Lowe, Rev. R. T., M.A. Cantab. Mem. Lisbon Roy. Acad. of Sciences, Cor. Mem. Z.S.L. *Lea Rectory, Gainsborough.*

1867.

Nov. 18. LUSH, THE HON. SIR ROBERT, KNT. Puisne Justice of the Court of Queen's Bench, 60, *Avenue Road, N.W.*

1868.

June 15. Lysons, Rev. Samuel, M.A. F.S.A. Hon. Canon of Gloucester Cathedral, *Hempsted Court, near Gloucester.*

M.

1869.

Jan. 18. Macafee, A. H. C. Esq. *Sydney, New South Wales* .
(83, *Coleman Street, E.C.*)

£ Macdonald, William, Esq. M.D. F.R.S.E. F.L.S. F.G.S. F.A.S.L. Fellow of the Royal College of Physicians, Edinburgh, Professor of Civil and Natural History, *St. Andrews, N.B.*

1872.

June 3. McLeod, Sir Donald, C.B. K.C.S.I. *Dec.*

1868.

Feb. 17. Macmillan, Rev. Archibald, 45, *Warrington Crescent, Warwick Road, Maida Vale, W.*

✠ Manners, Rev. John, M.A. Cantab. 6, *Victoria Park Square, N.E.*

1872.

Jan. 8. Margoliouth, Rev. Moses, LL.D. Ph.D. 23, *Pelham Crescent, Brompton, S.W.*

1871.

May 1. MARLBOROUGH, HIS GRACE THE DUKE OF, K.G. P.C. 10, *St. James's Square, S.W.; Blenheim House, Woodstock, Oxfordshire.*

✠ Marsh, Rev. Sir W. R. Tilson-, Bart. M.A. Oxon *Oxford and Cambridge Club, Pall Mall, S.W.*

✠ *†McARTHUR, ALEXANDER, Esq. F.R.G.S. F.A.S.L. *Raleigh Hall, Brixton Rise, S.W. (VICE-PATRON.)*

✠ McArthur, William, Esq., M.P. Alderman of London, *1, Gwydyr Houses, Brixton Rise, S.W.*

1869.

June 21. ¶ M'Cann, Rev. James, D.D. F.R.S.L. F.G.S. Incumbent of St. Jude's Church, Glasgow, 18, *Shaftesbury Terrace, Glasgow.*

1872.

July 15. McDougall, Rev. J. *Darwen, Lancashire.*

✠ † McFarlane, Patrick, Esq. *Comrie, Crieff, Perthshire.*

1869.

June 21. *Masterman, Thomas William, Esq. *Gordon Lodge, Reading.*

1872.

Feb. 19. Matthews, John T., Esq. *The Rookery, Shooter's Hill, Kent.*

1868.

Mar. 2. Mewburn, William, Esq. *Wykham Park, Banbury.*

1872.

Dec. 2. Mewburn, William, Esq. junr. 3, *Tavistock Square, W.C.*

♣ Miller, William V. Esq. R.N. 3, *Brighton Villas, Western Road, Cork.*

♣ Milner, Rev. John, B.A.Oxon. Chaplain R.N. *H.M.S. St. Vincent, Portsmouth; and Hartley, near Brough, Westmoreland.*

1872.

Dec. 2. Mitchell, Rev. R. *Church Lane, Harpur Ley, Manchester.*

♣ ¶* Mitchell, Rev. Walter, M.A. Cantab. *Purton Rectory, near Swindon. (VICE-PRESIDENT.)*

♣ Monckton, Lieut.-Col. the Hon. H. M. *near Wellington College, Berkshire.*

1872.

Dec. 2. Moorhouse, Rev. J., M.A. Rector of Paddington, 57, *Sussex Gardens, W.*

1867.

June 3. † MORLEY, SAMUEL, Esq. M.P. *Craven Lodge, Stamford Hill, N.*

♣ ¶* Morshead, Edward J. Esq. H.M. Civ. Serv. 32, *Kenton Street, W.C. (HON. FOREIGN SECRETARY.)*

1872.

June 1. Mozley, Rev. J. B., D.D. Regius, Professor of Divinity, and Canon of Christ Church, Oxford, *Christ Church, Oxford.*

1868.

Jan. 20. Mullings, Richard, Esq. *Stratton, near Cirencester.*

N.

⚡ Napier, John, Esq. Shipbuilder, *Saughfield House, Glasgow.*

⚡ Napier, Robert, Esq. Shipbuilder, *Glasgow; West Shandon, Dumbartonshire.*

1870.

May 2. Newman, Robert Rutland, Esq. Solicitor, 53, *Upper Bedford Place, W.C.*

⚡ * Newton, Alfred V. Esq. F.A.S.L. *Cleveland Villa, Lee, S.E.*

1872.

Feb. 19. Newton, W. Foster, Esq. *Bingham House, Richmond, Surrey.*

⚡ Niven, Rev. William, B.D. Incumbent of St. Saviour's, Chelsea, 5, *Walton Place, Chelsea, S.W.*

O.

1872.

Feb. 5. Oldroyd, Mark, Esq. jun. *Hyrtlands, Deusbury.*

⚡ * Ord, William M. Esq. M.D. Lond. Lecturer on Physiology and on Comparative Anatomy, St. Thomas's Hospital, 16, *The Paragon, Streatham Hill, S.W.*
11, *Brook Street, Hanover Square, W.*

⚡ * Owen, Rev. J. B., M.A. Cantab. *Dec.*

P.

• **Patton, John, Jun. Esq.** 11, *Pembury Road, Lower Clapton, E.*; 3, *White Lion Court, Cornhill, E.C.*

Pears, Rev. Edmund W., M.A. Oxon. *St. Peter's Rectory, Dorchester.*

† **PEEK, HENRY WILLIAM, Esq. M.P. J.P. for Surrey,** *Wimbledon House, S.W.* (VICE-PATRON.)

* **Petrie, Captain Francis W. H.** (late 11th Regiment), F.R.S.L. F.G.S. Member of the Royal Archæological Institute, 11, *Gloucester Terrace, Campden Hill, Kensington, W.* (HON. SECRETARY and EDITOR of the Journal of Transactions).

1871.

Oct. 24. **Phayre, Rev. R., M.A. T.C.D.** *West Raynham Rectory, Brandon.* (Loc. Hon. Sec.)

1872.

April 15. **Phené, J. S., Esq., F.S.A. F.G.S. F.R.G.S. &c.** 5, *Carlton Terrace, Oakley Street, Chelsea, S.W.*

1871.

Dec. 4. **Price, Rev. Aubrey Charles, M.A.** Chaplain to the Lord Bishop of Durham, Vicar of St. James's, Clapham, *Loat's Road, Clapham Park, S.W.*

1872.

Jan. 8. * **Prichard, Iltudus T. Esq. F.S.S. F.R.G.S.** Barrister-at-Law, 4, *Garden Court, Temple, E.C.*; 57, *Granville Park, Blackheath, S.E.*

Prothero, Thomas, Esq. F.S.A. M.R.I. Barrister-at-Law, 16, *Cleveland Gardens, W.*

R.

1872.

Feb. 5. Rae, John, Esq. LL.D. F.S.A. *Chislehurst.***JF** Ratcliff, Charles, Esq. *Wyddrington, Edgbaston, Birmingham.*

1872.

July 31. Reeve, Rev. J. W., M.A. Minister of Portman Chapel,
112, *Harley Street, W.*

1871.

April 10. Robbins, Rev. J., D.D. Ch. Ch. Oxon. Barrister-at-Law
of the Inner Temple, Vicar of St. Peter's, Bayswater,
88, *Kensington Park Road, W.***JF** Robertson, Peter, Esq. H. M. Civ. Serv. *Neworth, Kelso, N.B.*

1867.

Dec. 16. ¶* Row, Rev. C. A., M.A. Oxon. 55, *Gloucester Crescent, Regent's Park, N.W.*

1872.

March 4. Rowe, Rev. George Stringer, 20, *Grange Road, Edinburgh.*

1868.

Nov. 30. RUTLAND, HIS GRACE THE DUKE OF, K.G.
Lord Lieutenant of Leicestershire, &c. &c. 10,
Cromwell Road, S.W. ; Belvoir Castle, Grantham ;
and Cheveley Park, Newmarket.

S.

1871.

Mar. 20. † Sargood, Augustine, Esq. Q.C. Serjeant-at-Law, 2,
Belsize Road, N.W.

1870.

April 18. ¶ Savile, Rev. Bouchier Wray, M.A. Cantab.
Shillingford Rectory, Exeter.

1871.

Aug. 9. Savile, Rev. F. A., M.A. Trin. Coll. Camb. J.P. Rector
of Torwood, *Ardmore, Torquay.*

¶

Scales, George J. Esq. *Belvoir House, Hornsey Lane, N.*

1870.

Jan. 17. Scott, Rev. Robinson, D.D. *Wesleyan College, Belfast.*

1872.

Feb. 19. Seaber, Thomas, Esq. 26, *Martin's Lane, E.C.*

¶

Selwyn, Captain Jasper H., R.N. *Chequers Court, Tring,*
Herts, and 11, Gloucester Terrace, Hyde Park,
W.

¶

* † SHAFTESBURY, THE RIGHT HON. THE EARL OF,
K.G. 24, *Grosvenor Square, W., St. Giles House,*
Shaftesbury (PRESIDENT).

1872.

Feb. 19. Shann, G., Esq. M.D. Cantab. F.R.C.P. *Petergate,*
York.

¶

Shaw, E. R. Esq. B.A. *Tulse Hill School, Brixton, S.W.*

¶

Shaw, John, Esq. M.D. F.L.S. F.G.S. &c. *Viatoris*
Villa, Boston, Lincolnshire; and Reform Club
London, S.W.

¶

Shaw, Rev. William, 2, *Stanley Villas, Brixton Rise,*
S.W.

1871.

June 5. † Sheppard, Rev. Henry Winter, M.A. *The Rectory, Emsworth, Hampshire.*

1871.

Feb. 6. Shersby, Henry, Esq. 3, *Samuel Street, Woolwich, S.E.*

1871.

April 17. Shettle, R.C., Esq. M.D. Physician to the Royal Berkshire Hospital, 97, *London Street, Reading.*

§ Shields, John, Esq. *Western, Lodge, Durham.*

1869.

Jan. 18. Shillington, John J. Esq. *Belfast.*

§ Silver, Stephen W. Esq. *Bishopsgate Street Within, E.C.*

1871.

Dec. 4. † Smith, Major H. D. Broughton, H.M. Indian Army. *Dec.*

1870.

Nov. 7. Smith, Neil, Jun. Esq. A.M. 14, *Carden Place, Aberdeen.*

§ † Smith, Protheroe, Esq. M.D. M.R.I. 42, *Park Street, Grosvenor Square, W.*

1869.

May 10. Smith, The Very Rev. R. Payne, D.D. Dean of Canterbury, *The Deanery, Canterbury.*

§ † Smith, W. Castle, Esq. F.R.G.S. M.R.I. 1, *Gloucester Terrace, Regent's Park, N.W.*

1870.

April 4. Smith, Rev. William Saumarez, M.A. Cantab. Fellow of Trin. Coll. Camb. Principal of *St. Aidan's Theological College, Birkenhead.*

1868.

Oct. 19. Stone, David Henry, Esq. Alderman of London, 13, *Poultry, E.C., and Castleham, Hollington, Sussex.*

§ Stalkartt, John, Esq. 5, *Winchelsea Crescent, Dover.*

§ Sutherland, The Hon. P. C., M.D. M.R.C.S. Edin. F.R.G.S. Surv. Gen. *Pietermaritzburg, Natal.*

T.

1872.

Oct. 18. TEIGNMOUTH, THE RIGHT HON. THE LORD,
Langton Hall, Northallerton.

¶ Thornton, Rev. Robinson, D.D. Oxon. *Warden of Trinity College, Glenalmond, Perthshire.* (VICE-PRESIDENT.)

1871.

April 10. Tischendorf, Constantin' de, Th.D. Ph.D. D.C.L. LL.D. Professor of Biblical Paleography at the University of Leipsic, *Leipsic.* (HONORARY FOREIGN CORRESPONDENT.)

1867.

Aug. 5. ¶ Titcomb, Rev. J. H., M.A. Rector of St. Stephen's, *Wingfield House, South Lambeth Road, S.W.*

1872.

Feb. 5. Townend, Arthur Powell, Esq. *Chislehurst, S.E.*

1872.

Feb. 5. Townend, Thomas, Esq., jun. *Chislehurst, S.E.*

¶ Townley, James, Esq. M.D. L.R.C.P. Edin. F.R.C.S. Engl. 302, *Kennington Park Road, S.*

1871.

Aug. 9. TROWER, THE RIGHT REVEREND BISHOP, D.D. late Bishop of Gibraltar, formerly Fellow of Oriel, *The Rectory, Ashington, Pulborough.*

¶ Twells, Rev. John, M.A. Cantab. Prebendary of Lincoln, *Darby House, Sunbury-on-Thames.*

¶ † Twells, Philip, Esq. M.A. Oxon. *Chase Side House, Enfield.*

V.

¶ Vallack, Rev. B. W. S., B.A. Oxon. *St. Budeaux's Vicarage, near Plymouth.*

1869.

Feb. 15. Vanner, Henry Thornton, Esq. 32, *Great St. Helen's, E.C.*

¶ Vanner, James Englebert, Esq. *Camden Wood, Chislehurst, S.E.*

1867.

June 17. Vanner, John, Esq., *Banbury.*

¶ * Vanner, William, Esq. F.R.M.S. *Camden Wood, Chislehurst, S.E.*

¶ Vickers, J. J. Esq. 3, *Brixton-Hill Terrace, Brixton Hill, S.W.*

1872.

Dec. 2. Vincent, Samuel, Esq., *Sussex Villa, King Edward's Road, Hackney, E.*

W.

¶ * Waddy, Samuel Danks, Esq. B.A. Barrister-at-Law, 3, *Paper Buildings, Temple, E.C.*

¶ Waddy, Rev. S. D., D.D. *Redlands, Bristol.*

1871.

Feb. 20. Wade, Major I. P. Carruthers, 6, *Wemyss Place, Queen Street Gardens, Edinburgh, W.*

-1867.

June 3. Walrond, T. H. M. Esq. 157, *Cambridge Street, Pimlico, S.W.* and 6, *Whitehall Yard, S.W.*

1871.

May 1. † Walter, John, Esq. M.P. 40, *Upper Grosvenor Street, W.*; *Bearwood, Berkshire.*

1870.

Oct. 10. Walters, Gregory Seale, Esq. 12, *Chester Terrace, Regent's Park, N.W.*

1872.

April 15. Waring, F. R. Esq. Dep. Inspector - General of Hospitals, *Army and Navy Club, S.W.*

1871.

May 1. Warner, F. I., Solicitor, 3, *Clifton Terrace, Winchester.*

1871.

Mar. 6. Weldon, Rev. George Warburton, M.A. Vicar of St. Saviour's, Chelsea, 4, *Vincent Street, Ovingdon Square, S.W.*

✠ * West, William Nowell, Esq. 30, *Montague Street, Russell Square, W.C.* (HONORARY TREASURER.)

✠ ¶ Wheatley, J. H. Esq. Ph.D. F.G.S. *Abbey View, Sligo* (Loc. Hon. Sec.)

1868.

Feb. 17. White, Rev. Lewis Borrett, M.A. Oxon. Rector of St. Mary Aldermary, 67, *Queen Street, Cheapside, E.C.*

✠ Whitwell, Edward, Esq. *Fair Field, Kendal, Westmoreland.*

1872.

July 31. Wickham, The Venerable Robert, M.A. Archdeacon and Canon of St. Asaph, *Gresford Rectory, Wrexham.*

1870.

Mar. 21. Wilkinson, Thomas, M.D. St. Andrew's, F.R.C.S. Ireland, 28, *Trinity Square, Brixton, S.W.*

1870.

⚡ Williams, Rev. John, M.A. Cantab. 69, *Marine Parade, Brighton.*

⚡ Williams, George, Esq. 30, *Woburn Square, W.C.*

1872.

Feb. 5. Winch, W.R., Esq., *Chislehurst, S.E.*

⚡ Wollaston, Thomas Vernon, Esq. M.A. F.L.S. &c.
1, *Barnepark Terrace, Teignmouth.*

1871.

Aug. 9. *Wood, Rev. J. G., M.A. F.L.S. 9, *Erith Road, Belvedere, S.E.*

1872.

Feb. 19. Wood Rev. J. R., M.A. *Trinity College, Eastbourne.*

⚡ *† Woodhouse, Alfred J. Esq. L.D.S. M.R.I. F.R.M.S.
1, *Hanover Square, W.*

⚡ Wright, Francis Beresford, Esq. M.A. Cantab. J.P.
F.R.H.S. *Aldercar Hall, Langley Mill, Nottingham.*

⚡ Wright, Rev. Henry, M.A. Oxon. *Standard Hill, Nottingham.*

⚡ † Wright, J. Hornsby, Esq. 2, *Abbey Road, Maida Hill, N.W.*

⚡ Wyman, C. W. H. Esq. 53, *St. John's Park, Upper Holloway, N.*

Y.

1871.

Jan. 30. Yeates, A. G. Esq. *Collinson House, Effra Road, Brixton, S.W.*

⚡ Young, Rev. Charles, M.A. Cantab. 36, *Sussex Square, Brighton.*

ASSOCIATES.

(Life Associates †.)

1872.

July 31. ABRAHAM, THE RIGHT REV. BISHOP, D.D.
Coadjutor to the Bishop, and Prebendary of, Lich-
field, *The Close, Lichfield.*

Ɔ Adam, Rev. Stephen C., M.A. Cantab. Assoc. Sec. for
Irish Missions, *St. Jude's Vicarage, 7, Tottenham
Road, Wolverhampton.*

1872.

Feb. 5. Adams, Rev. John, M.A. (Oxon.) *Stockcross Vicarage,
Newbury.*

1872.

Jan. 8. Allen, Mrs. A. E., 71, *Long Acre, W.C.*

1871.

Feb. 6. Allen, J. Esq. 71, *Long Acre, W.C.*

1871.

June 9. Arnott, Rev. S., M.A. *Vicarage, Turnham Green, W.*

1872.

Oct. 1. Arthur, Mrs., 2, *Penlee Villas, Stoke, Devonport.*

1872.

June 1. Bailey, Rev. H. R., M.A. late Fellow and Tutor of
St. John's Coll. Cambridge, *Rectory, Great Warley,
Brentwood.*

1871.

June 9. Baker, Rev. W., M.A. *Crambe Vicarage, near York.*

Ɔ Barker, Rev. Joseph H., M.A. Cantab. *South House,
Hereford.*

1872.

Oct. 18. Bartle, Rev. G., M.A. PH.D. LL.D. D.D. Principal of
Freshfield College, *Freshfield, Lancashire.*

Ɔ Bartlett, Mrs. *Dec.*

¶ Baylee, Rev. Joseph, D.D. late Principal of St. Aidan's College, Birkenhead, *Shipscomb Rectory, Painswick, Stroud.*

1872.

Dec. 2. Baynham, G. W. Esq. 247, *Sancheshall Street, Glasgow.*

1871.

Feb. 30. Beckwith, Miss Jessie H. *Spring Bank, Malvern.*

1872.

June 1. † Bickersteth, The Venerable E., D.D. Archdeacon of Buckingham, Prolocutor of Convocation, Chaplain to the Bishop of Ripon, and Canon of Ch. Ch. Oxford, *the Prebendal, Aylesbury.*

1872.

July 15. Blenkin, Rev. G. B., M.A. Prebendary of Lincoln, R.D. *Boston Vicarage, Lincolnshire.*

1872.

July 15. Boulton, Rev. Thomas P. LL.D. Principal of the London College of Divinity, *St. John's Hall, Highbury Park, N.*

1870.

April 4. Bourn, Rev. H. H., F.R.S.L. 9, *Friar Street, Sudbury, Suffolk.*

1871.

June 5. Bowe, Rev. W. *St. John's, Weardale, Darlington.*

1868.

Jan. 6. Brebner, Alexander C. Esq. H.M. Civ. Serv. *Audit Office, Somerset House, W.C.*

1872.

April 15. * Bree, C. R. Esq. M.D. M.R.C.S. L.S.A. Senior Physician of Essex and Colchester Hospitals, *East Hill, Colchester.*

1869.

Feb. 1. Bretherton, Francis, Esq. *Melville Lodge, Lower
Tulse Hill, S.W.*

1872.

March 4. Brodie, Rev. William, M.A. Trin. Coll. Camb. *East
Meon, Petersfield.*

£ Broke, Miss, 4, *Marlborough Buildings, Bath.*

1871.

Mar. 20. Brooks, Rev. J. W., M.A. Prebendary of Lincoln,
Great Ponton Rectory, near Grantham.

1871.

May 1. Broome, Rev. J. H., M.A. *Haughton Hall, Roughton.*

1872.

June 1. Brown, James, Esq. LL.D. *Craigmill House, Stirling.*

1872.

July 15. Buckley, Rev. John Wall, M.A. Vicar of St. Mary's,
1, St. Mary's Terrace, Paddington, W.

1871.

May 22. Burls, C. Esq. *Peckham Rye Common, S.E.*

1872

March 4. Bury, Rev. Charles, A., B.A. Oxon. *Sandown, Isle of
Wight.*

£ Burgess, Captain Boughey (late H.M. Indian Army),
Secretary to the *Royal United Service Institution,*
Whitehall Yard, S.W.

1872.

Dec. 2. Carr, John, Esq. 19, *Osborne Road, Finchley Park, N.*

1867.

June 3. Colan, Hunter Alexander, Esq. M.R.C.S. Lond. *Royal
Horse Artillery, Cawnpore, India.*

£ Colan, Thomas, Esq. M.D. Surgeon R.N. *H.M.S.
Rattlesnake, Cape of Good Hope.*

1872.

June 1. Collis, Rev. Henry, M.A. *St. Philip's Vicarage, Maid-
stone, Kent.*

✠ Cosens, Rev. W. Reyner, M.A. Oxon. et Cantab.
Vicarage, Dudley.

1872.

Oct. 18. COTTERILL, THE RIGHT REV. BISHOP, D.D.
Coadjutor Bishop of Edinburgh, 24, *Rutland
Square, Edinburgh.*

✠ Cowan, Rev. Ernest, B.A. Cantab., Assoc. Sec. C. & C.
Ch. Soc. *St. John's Vicarage, Blackheath, S.E.*

✠ † Curteis, Mrs. J. *Aldenharn, St. James's Road, Tun-
bridge Wells.*

✠ Deane, Rev. Charles, D.C.L. Oxon (formerly fellow of
St. John's Coll.) *Rosmore, Spring Grove, Isle-
worth, W.*

✠ Delpratt, W. Esq. M.R.C.S. *National Club, Whitehall
Gardens, S.W.*

1869.

May 3. DERRY and RAPHOE, THE RIGHT REV. THE LORD
BISHOP OF, *Athenæum Club, London, S.W. ; and
the Palace, Derry.*

1869.

Jan. 18. Dibdin, R. W. Esq. F.R.G.S. 62, *Torrington Square,
W.C.*

1869.

Jan. 18. Dibdin, Charles, Esq. F.R.G.S. H.M. Civ. Serv. 62,
Torrington Square, W.C.

1870.

Mar. 7. Dugmore, Rev. H. H. *Queenstown, Cape of Good Hope.*

1872.

May 13. Edgar, Rev. Joseph H. M.A. *East Sheen.*

✠ Ensor, Thomas, Esq. *The Cottage, St. Leonard's,
Exeter.*

1869.

Feb. 15. † Finley, Samuel, Esq. *Montreal, Canada* (83, *Coleman Street, E.C.*).

1872.

July 31. Forsyth, W. Esq. Q.C. LL.D. F.R.G.S. 61, *Rutland Gate, S.W.*; *the Firs, Mortimer, Reading.*

1872.

Oct. 18. Fox, Rev. G. T. M.A. *St. Nicholas Vicarage, Durham.*

1871.

Dec. 4. Franklyn, Rev. T. E., M.A. *Christchurch Vicarage, Tunbridge Wells.*

1872.

July 15. Freeman, the Venerable P., M.A. Canon Residentiary and Archdeacon of Exeter, Examining Chaplain to the Bishop of Exeter, *Thorneolin, Collumpton, Devon.*

§

Gardiner, Major G. Cooper, R.S.F. 84, *Warwick Street, Belgravia, S.W.*

§

† Gedge, Sydney, Esq. M.A. (Corpus Christi Coll. Cambridge) *Mitcham Hall, Surrey.*

1872.

April 1. Geldart, Mrs. Thomas, *Bowdon, near Manchester.*

1872.

July 31. Glyn, Rev. Carr J., M.A. *Witchhampton Rectory, Wimbome.*

1872.

July 15. Gordon, Rev. Robert, 5, *Red Lion Street, Wapping.*

1872.

July 15. Goulburn, the Very Rev. E. M., D.D. Dean of Norwich, *the Deanery, Norwich.*

1872.

Dec. 2. Graham, J. H. S. Esq. 1, *Belgrave Terrace, Shepherd's Bush, W.*

§ Grant, Captain Henry D., R.N. 4, *Sussex Place Southsea.*

1872.

Mar. 18. Hall, Alexander, Esq. F.G.S. Member Field Naturalists Club, 12, *Dowgate E.C.; Lee Park, Blackheath, S.E.*

1872.

Oct. 18. Halley, Rev. J. Mem. Sydney Univ. *Williamstown Victoria.*

§ Hamilton, William, Esq. M.D. L.R.C.S. Ireland, *Agra Villa, Torquay, Devon.*

1872.

Oct. 18. Harcourt, E. Vernon, Esq. M.A. *Whitwell Hall, York.*

§ Hare, Rev. Henry, A.B. Chaplain to the Forces, *Parkhurst Barracks, Isle of Wight.*

1871.

Feb. 20. † Harries, G. Esq. *Richestone, Milford Haven.*

1870.

May 2. Harris, William John, Esq. M.R.C.S.E. L.A.C. F.M.S. 13, *Marine Parade, Worthing.*

1869.

Mar. 1. Harvard, Rev. John, *Wesley College, Sheffield.*

1872.

Oct. 18. Heaton, Ralph, Esq. *The Mint, Birmingham.*

1872.

Dec. 2. Henderson, William, S. P. Esq. *Rydes Hill Lodge, Guildford.*

1872.

June 3. Heurtley, Rev. Charles Abel, D.D., Canon of Ch. Ch, Oxford, Margaret Professor of Divinity, Oxford. *Christ Church, Oxford.*

1872.

July 31. Hill, The Venerable T., B.D. Archdeacon of Derby,
Church Side, Hasland, Chesterfield.

1872.

Feb. 5. Hoare, Rev. Canon Edward, M.A. *Tunbridge Wells.*

1871.

June 5. Hoare, Rev. William H., M.A. *Oakfield, Crawley, Sussex; Oxford and Cambridge Club, S.W.*

1872.

Oct. 15. Huxtable, the Venerable A. M.A., Archdeacon and
Prebendary of Salisbury, *Sutton Walden, Shaftesbury.*

1871.

June 5. Irons, Mrs. W. J. 20, *Gordon Square, W.C.*

£

Ivall, David, Esq. *Somers Cottage, Upper Tulse Hill, S.W.*

1872.

Oct. 18. Kenah, Rev. S., B.A. *H.M.S. Rattlesnake, Cape of Good Hope.*

1872.

Oct. 18. Lee, The Rev. William, D.D. *Roxburgh, Kelso.*

1871.

April 10. Liddon, Rev. H. P., D.D. D.C.L. Canon of St. Paul's,
Dean Ireland's Professor of Exegesis in the Uni-
versity of Oxford, *Christ Church, Oxford; 3, Amen Court, E.C.*

1872.

June 1. LLANDAFF, THE RIGHT REV. THE LORD BISHOP
of, D.D. 17, *Queensgate Place, S.W.; Bishop's Court, Llandaff.*

1871.

June 5. Lloyd, Rev. R., M.A. (Jesus Coll. Camb.) *Calverley Terrace, Tunbridge Wells.*

JF Lucas, H. Walker, Esq. *Mount Rose, Oldfield Road, Bath.*

JF † Lycett, Sir Francis, Knt. Ex-Sheriff of the City of London, 18, *Highbury Grove, N.*

JF Maberley, G. Esq. 46, *Boundary Road, St. John's, N.W.*

1872.

July 15. M'DOUGALL, THE RIGHT REV. BISHOP, D.C.L., Canon of Ely, and Archdeacon of Huntingdon, *Godmanchester Vicarage, Huntingdonshire.*

1872.

Dec. 2. Martin, Rev. J. *Sydenham Park, Sydenham, S.E.*

1871.

April 10. Mitchell, H. S. Esq. *Vestry Clerk's Office, 5, Great Prescott Street, Whitechapel, E.*

1869.

May 3. Money, Rev. C. F. S., M.A. Cantab. *St. John's Parsonage, Upper Lewisham Road, S.E.*

1872.

Dec. 2. Morris, Professor, G.S., M.A. Prof. Modern Languages and Literature, *The University, Ann Arbor, Michigan, United States.*

JF ¶ Moule, Rev. Henry, M.A. Cantab., *Fordington Vicarage, Dorset.*

1871.

Oct. 24. Nelson, J. H. Esq. B.A. Cantab. *Campden Place, Lewisham.*

1871.

March 6. Nicholl, Rev. R., M.A. *The Chantry, Norton, near Sheffield.*

1872.

Oct. 18. Nicholson, Professor H. Alleyne, M.D., D.Sc. M.A.
Ph.D. F.R.S.E. F.G.S. *University College,*
Toronto, Canada.

1872.

July 15. Ogle, W. Esq. M.D. *Fairgate, Derby.*

Ɔ Payne, William, Esq. *Guildhall, London, E.C.*

1869.

Mar. 1. Race, George, Esq. *Westgate, Weardale, Darlington.*

Ɔ Rainey, A. C. 5, *Manders Terrace, Ranelagh, Dublin*

Ɔ * Rigg, Rev. James H., D.D. 130, *Horseferry Road,*
Westminster, S.W.

1872.

June 1. Robertson, Rev., W. A. Scott, M.A., Cantab. Rector of
Elmley, Whitehall, Sittingbourne.

1872.

April 15. Rowe, Henry Miller, Esq. *Fulham Union Workhouse,*
Hammersmith, W.

Ɔ Salt, Mr. Thomas G. 63, *Downs Park Road, Shackle-*
well, N.E.

1871.

April 10. Selwyn, Rev. W., D.D. Proctor in Convocation,
Chaplain in Ordinary to the Queen, Canon of Ely,
Margaret Professor of Divinity Cambridge, *St.*
John's, Cambridge.

1871.

April 17. Seymour, Rev. W. S. M.A.

1871.

April 10. Sharpnell, Fleetwood Keats, Esq. 2, *Lansdowne Crescent,*
Stockwell, S.

1872.

July 31. Shaw, Benjamin, Esq. M.A., Barrister-at-law, late Fellow of Trin. Coll. Camb. 8, *Cambridge Square, W.*

1872.

April 1 Sheppard, William John, Esq. '7, *Addison Gardens South, Kensington, W.*

1872.

July 3. Simpson, Rev. J., LL.D. *Vicarage, Kirkby-Stephen.*

1872.

July 15. Simpson, Rev. Robert James, M.A. Oriel Coll. Oxon. Rector of St. Clement Danes, 6, *Norfolk Street, Strand, W.C.*

✻ Skrine, Rev. C., M.A. 20, *Devonshire Terrace, Hyde Park, W.*

1871.

June 19. Stevenson, Rev. J. F., LL.B. 4, *Wellington Place, Reading.*

1872.

Oct. 18. Stewart, Mark J., Esq. M.A. Oxon. Bar.-at-law, *Ardwell, Stranrair, N.B.*

1871.

Aug. 9. Strutt, Rev. P. 9, *Alma Square, St. John's Wood, N.W.*

1869.

Mar. 1. Smith, Samuel Hill, Esq. *Sheffield.*

1870.

May 21. Sutcliffe, James T. Esq. *Bacup, near Manchester.*

1871.

May 1. Thomas, William Cave, Esq. 203, *Camden Road, Villas, N.W.*

1871.

May 1. Thomson, Mrs. Zoe.

JF Thornton, Rev. Samuel, M.A. Rector of St. George's,
142, *Hockley Hill, Birmingham.*

1871.

Feb. 20. Tremlett, Rev. F. W., D.C.L. Honorary Doctor of
Philosophy of Jena Univ. F.R.G.S. Chaplain to
Lord Waterpark, Ecclesiastical Commissary for the
American Prelates and for the University of the
South, Vicar of St. Peter's, Belsize Park, *The
Parsonage, Belsize Park, N.W.*

1869.

Apr. 19. Turnbull, Robert O. Esq. 36, *Walnut Street, High
Town, Manchester.*

JF Vessey, Leonard Abington, Esq. 13, *College Green,
Bristol.*

1872.

July 15. Vincent, Rev. Osman Parke, M.A. 23, *Devonshire
Street, Portland Place, W.*

1872.

Jan. 8. Vivian, Rev. J. C., *Raiatea, South Pacific (London
Missionary Society, 8, Blomfield Street, Finsbury,
E.C.*

1871.

Aug. 9. Warleigh, Rev. H. S. *Rectory, Ashchurch, Tewkesbury.*

1872.

Oct. 18. Warwick, W., Esq. M.D. *Southend, Essex.*

JF Webster, Rev. W., M.A. late Fellow of Queen's Coll.
Cambridge, Incumbent of Montpelier Chapel, *Cam-
bridge Park, Twickenham.*

1871.

Aug. 9. Whitelock, Rev. B., M.A. F.R.M.S. Incumbent of
Groombridge, *Groombridge, Tunbridge Wells.*

1871.

May 1. Whitfield, Rev. F., M.A. Incumbent of St. John's,
Bexley, 17, *Lansdowne Road, Wimbledon, S.W.*

1870.

Mar. 17. Whitmee, Rev. S. J. *Samoa, South Pacific (London Missionary Society, 8, Blomfield Street, Finsbury, E.C.)*

1870.

May 2. Williams, Rev. Frederic, Exhib. from Eton Coll.
Scholar of C.C.C. B.A. Cantab. *Saltley Vicarage,*
near Birmingham.

1872.

July 15. Windeatt, Thomas, Esq. *Tavistock.*

1872.

Dec. 2. Winterbottom, Charles, Esq. 16, *Sloane Street, S.W.*



LOCAL HONORARY SECRETARIES.

DAVIS, Rev. W. B., M.A. *The College, Torquay.*

FLEMING, Rev. T. S., F.R.G.S. *Retford, Notts.*

HITCHMAN, W. Esq., M.D. 29, *Erskine Street, Islington Square,
Liverpool.*

JOHNSON, Rev. E. *Oxton, near Birkenhead.*

KNAPP, Rev. J. *St. John's Parsonage, Portsea.*

PHAYRE, Rev. R., M.A. *West Raynham Rectory, Brandon.*

WHEATLEY, J. H., Esq. Ph.D. F.G.S. *Abbey View, Sligo.*

APPENDIX (B).

LIST OF BOOKS

IN THE LIBRARY OF

The Victoria Institute,

DECEMBER 31st, 1872.

A.

Academy, The. 3 vols 1869–72, and current parts.

Adam and the Adamite ; or, the Harmony of Scripture and Ethnology. By D. M'Causland, Q.C., LL.D.

Age of Man. By Professor Kirk, D.D.

Ancient Empires : their Origin, Succession, and Results ; with a Preliminary View of the Unity and First Migration of Mankind.

Ancient Pillar Stones of Scotland. By G. Moore, M.D.

Animal Physiology. By W. B. Carpenter, M.D.

Anti-Secularist Lectures. By Rev. J. McCann, D.D.

Aphasia. By Dr. Bateman.

Aquarium, The. By P. H. Gosse, F.R.S.

Architecture. Reports and Papers read at the Meetings of the Architectural Societies of the County of York during the Year 1865.

Astronomical Geology : A Treatise respecting the Causes to which the Structural and Superficial Configuration of the Earth's Crust is attributable. By R. G. M. Browne.

Astronomy, Current Physical,—Critically Examined and Confuted. By J. Reddie.

Astronomy. See *Mazzaroth ; Solar System, &c.*

Athenæum, The, for 1870 to 1872. 6 vols. and current parts.

B.

Baddam's Philosophical Transactions. See *Royal Society*.

Bagster's Chronological Atlas: a Complete Series of Maps
Elucidatory of the Sacred History.

Bible, The.

Bible, The. Speaker's Commentary. 3 vols.

Bible Handbook, The. By Rev. J. Angus, D.D.

Bible of every Land.

Bible, Cruden's Concordance to the.

Bible. See *Pentateuch*; *Scripture*.

Bible, The, and Modern Thought. By Rev. T. R. Birks, M.A.

Bible, Truth of the. By Rev. B. W. Savile, M.A.

Biblical and Theological Instruction, A Course of. 2 vols.
By Rev. J. Baylee, D.D.

Biblical Criticism, A Compendium of. By F. Sargent.

Biographical Treasury. By S. Maunder.

Birds, British, The Food, Use, and Beauty of. By G. O. G.
Napier.

Black Diamonds; or, the Gospel in a Colliery District. By
H. H. Bourn.

Botany :—

Hortus Cantabrigiensis; or, an Accented Catalogue of Indi-
genous and Exotic Plants cultivated in the Cambridge
Botanic Gardens. By James Don.

Prodromus Systematis Naturalis Regni Vegetabilis. Par A.
De Candolle. 20 tom.

British Empire, McCulloch's Account of the. 2 vols.

British Sea Anemones and Corals. By P. H. Gosse, F.R.S.

British Quarterly Review. 2 vols. and 1 part.

Builders of Babel, The. By Dominic M'Causland, Q.C., LL.D

C.

Candlish, Rev. Dr. See *Genesis*.

Candolle, A. De. See *Botany*.

Cause and Effect; or, the Globe we Inhabit. By R. M. Browne, F.G.S.

China. Ti-Ping Tien-Kwoh; the History of the Ti-Ping Revolution. 2 vols.

Christ in the Pentateuch; or, Things Old and New concerning Jesus. By H. H. Bourn.

“Christ is All:” The Gospel of the Pentateuch. By the Very Rev. Henry Law. 4 vols. (Pentateuch.)

Christ of the Gospels, The, and the Romance of M. Rénan. By Rev. Dr. Schaff and M. Napoléon Roussel.

Christ our Light. By the Rev. Charles Graham.

Christian Evidences. See *Bible; Christ; Daniel; Ethnology; Geology; Gospel; Inspiration; Prophetic Outlines; Radiation; Scripture and Science; Shinar*.

Christian Sacerdotalism. By Dr. J. Jardine.

Christianity and Common Sense. By Sir W. Jones, Bart.

Christianity, The Early Years of. By E. De Pressense, D.D.

Christianum Organum; or, the Inductive Method in Scripture and Science. By J. Miller, M.A.

Clergy List, 1872.

Coal under Secondary Formations. See *Geology*.

Colenso, Bishop:—

A full Review and Exposure of Bishop Colenso's Errors and Mis-calculations in his Work, “The Pentateuch and Book of Joshua Critically Examined.” By the Hon. Judge Marshall.

Anti-Colenso. By Johannes Laicus.

An Old Indian's Plain Solution of some of the Difficulties of Dr. Colenso. By J. Stalkartt.

Collisions at Sea, On the Value of Coloured Side Lights as a Means for preventing. A Lecture delivered at the Sailors' Home, by T. Gray.

Comparative Anatomy. By W. M. Ord, M.D.

Congressional Directory of the Third Session of the Forty-first Congress of the United States of America.

Concordance to the Bible, Cruden's. Large edition.

Concordance to the Bible, on the basis of Cruden. By J. Eadie, D.D., LL.D.

Creation, the Week of; or, The Cosmogony of Genesis considered in its Relation to Modern Science. By G. Warington.

Current Physical Astronomy Critically Examined and Confuted. By J. Reddie.

D.

Daniel, The Book of: Remarks on the Prophetic Visions in ;
with Notes on Prophetic Interpretation in connexion with
Popery, and a Defence of the Authenticity of the Book of
Daniel. By S. P. Tregelles, LL.D.

Darwinism, Fallacies of. By Dr. C. R. Bree.

Death, Victory over. By Rev. W. Niven, B.D.

Deluge, The Mosaic: an Enquiry into the Truth and Certainty
of. By Patrick Cockburn, M.D.

Descent of Man. By C. Darwin. 2 vols.

Desert of the Exodus. By Captain E. H. Palmer. 2 vols.

Devonshire Coast. By P. H. Gosse, F.R.S

Dictionary, English. By Dr. Nuttall.

Directories, The A, B, C.

„ The Court.

„ The Newspaper Press. 1873.

„ London Diocese Book. 1872-3.

„ London Post Office. 1873.

„ Parliamentary Companion. 1871-3.

Discoveries in Science by the Medical Philosopher: an Oration
delivered on the Ninety-sixth Anniversary of the Medical
Society of London. By Sir G. Duncan Gibb, Bar., M.D.

Dynamical Theory, The. By A. T. Ritchie. 1 vol. Also a
Copy in 8 parts.

E.

Earth, Ages of the. Biblical Testimonies to the Earth's Antiquity and Progressive Development. By Rev. David Pitcairn, D.D.

Earth, Physical History of the.

Eclectic Review, 1868. (Art. Anthropology.)

Eden, Traditions of. By H. Shepherd.

Edinburgh Gazetteer, 6 vols.

Edinburgh Philosophical Journal, 7 vols.

Edinburgh University Calendar. "

Electric Telegraph, The. By Dr. Lardner.

Electric Telegraph: Authorship of the Practical Electric Telegraph of Great Britain. By Rev. T. F. Cooke, M.A.

English Mechanic. Vol. XII.

Ethnology:—

Papers offered for Discussion at the Meeting of the British Association at Dundee, in Reply to the Speculations recently promulgated in regard to the Antiquity and Nature of Man. By Rev. James Brodie, A.M.

The First Man and his Place in Creation, considered on the Principles of Science and Common Sense, from a Christian Point of View. With an Appendix on the Negro. By G. Moore, M.D.

See *Adam and the Adamite; Flint Implements.*

Evangelical Alliance: Proceedings of the Amsterdam Conference, August, 1867.

Exodus of Israel, The; its Difficulties Examined, and its Truth Confirmed. By Rev. T. R. Birks, M.A.

Exposition of Hebrews VI. By A. Brown.

Expression of the Emotions. By C. Darwin.

F.

Facts and Dates. By Rev. A. Mackay, LL.D.

Fiji and the Fijians. By Thomas Williams and James Calvert.
2 vols.

First Man, The. See *Ethnology*.

Flint Implements from Drift not Authentic ; being a Reply to the Geological Evidences of the Antiquity of Man. By N. Whitley.

Food Journal, 1870 to 1872.

Fragments of Science for Unscientific People. By Professor Tyndall.

Fresh Springs of Truth ; a Vindication of the Essential Principles of Christianity. By J. Reddie.

G.

Genesis, Book of, Review of Rev. Dr. Candlish's First Lecture on Genesis. By P. M'Farlane, M.V.I.

Genesis. See *Creation, Week of*.

Geography, System of. By James Bell. 12 vols.

Geology :—

A New System of Geology, in which the Great Revolutions of the Earth and Animated Nature are reconciled at once to Modern Science and Sacred History. By A. Ure, M.D.

Astronomical Geology. By R. G. M. Browne.

Coal under Secondary Formations. By J. Holdsworth, M.G.S.F.

Exposure of the Principles of Modern Geology in a Review of King's "Geology and Religion;" wherein is shown the utter Incompatibility of these Principles with both Science and Sacred History. By P. McFarlane.

Mineral and Mosaical Geologies, A Comparative Estimate of the. By Granville Penn. 2 vols.

Minerals, Mines, and Soils of Ireland, in Reference to the Amelioration and Industrial Prosperity of the Country. By J. Holdsworth, M.G.S.F.

Modern Geology, Antidote against. By P. McFarlane. 2 copies.

Papers on. By Rev. J. Brodie, M.A.

See *Flint Implements*.

Sermons in Stones; or, Scripture confirmed by Geology. By D. M'Causland, Q.C., LL.D.

Gloucestershire. See *Language*.

God's Word Written. By Rev. E. Garbett, M.A.

Gospel Truths. By R. Brown.

H.

Handbook of the Year 1868. By G. H. Townsend.

Harmony of the Bible with Experimental and Physical Science.
By Rev. A. Rigg, M.A.

Heavens, The, a Physical Description of. By Alexander Von Humboldt.

Hebrew Poetry, Metrical Versions of Early. By F. Rolleston.

Henslow, Memoir of the late Professor. By his Son.

Herodotus. By Professor Rawlinson. 4 vols.

Herschel, Sir J. F. W., Preliminary Discourse on the Study of Natural Philosophy.

Hortus Cantabrigiensis, Don's. See *Botany*.

I.

Imperial Calendar.

Imperial Cyclopædia of the Sciences and Arts. 4 vols.

Inspiration: its Nature and Extent. By Rev. C. A. Row, M.A.

Inspiration. See *God's Word Written*.

Israel: An Exposition, Critical, Explanatory, and Practical, of Hebrews vi. 4-8, with Reference likewise to Israel as a Nation, in connexion with this particular passage of Scripture. By R. Brown.

Italy, The Awakening of, and the Crisis of Rome. By Rev. J. A. Wylie, LL.D.

J.

Jah, The Wonderful Word. By E. Poulson.

Jerusalem, The Recovery of. By Captains Wilson and Warren (Published under the direction of the Palestine Exploration Fund).

K.

Keys to Scriptural Problems. By Rev. W. Baker, M.A.

L.

Language. See *Our Vulgar Tongue*.

Language. See *Shinar*.

Laws of Vital Force in Health and Disease ; or, the True Basis of Medical Science. By Dr. E. Haughton.

Lempriere's Classical Dictionary.

Life : its Nature. By L. H. Grindon.

Life Science, Thoughts on. By B. Place.

Life Science, Thoughts on. By Rev. E. Thring, M.A.

Literature, Schlegel's History of.

Livingstone, How I Found. By Henry M. Stanley.

London Quarterly Review, 1870-72. 7 vols. and current parts.

M.

Matter : What is Matter? By an Inner Templar.

Mazzaroth ; or, the Constellations. By Fr. Rolleston. 2 copies.

Mechanic, The English. 1870-71.

Medical Times, 1870-72.

Medical Philosopher, Discoveries in Science by the.

Meteorology : The Weather Book. By Rear-Admiral Fitzroy.

Metrical Versions of Early Hebrew Poetry. By Fr. Rolleston.

Mineral and Mosaical Geologies, a Comparative Estimate of
the. By Granville Penn.

Mystical Woman, The. By Dr. Dyonisius.

N.

Natal, Bishop of. See *Colenso, Bishop*.

Natural Philosophy. 2 vols.

Natural Philosophy.

Natural Philosophy, Treasury of.

Natural Sciences, Baird's, Cyclopædia of the.

Nature : a Weekly Illustrated Journal of Science. Vols. I. to V.,
and current parts.

New South Wales, Industrial Progress of. Government Reports.

Notes and Queries, 1870 to 1872. 4 vols. and current
numbers.

O

Omphalos. By P. H. Gosse, F.R.S.

Optics. By Sir David Brewster.

Our British Ancestors. By the Rev. Canon Lysons, M.A.

Our Vulgar Tongue. By the Rev. Canon Lysons, M.A.

P.

Palestine Exploration Fund, Proceedings of the. Vol. for 1872,
and current parts.

Paley's Evidences of Christianity.

Pentateuch, The Gospel of the. By the Very Rev. Dean Law.
4 vols.

Pentateuch. See *Colenso, Bishop*.

Philosophy, a Sketch of a. By Rev. J. G. Macvicar, D.D.
LL.D. 3 parts in 1 vol.

Philosophy, Moral and Metaphysical. By Rev. F. D. Maurice.

Philosophy, Treasury of Natural.

Plain Sermons for Perilous Times. By Rev. W. Niven, B.D.

Plurality of Worlds: The Positive Argument from Scripture.
By Rev. R. Knight.

Polynesia, Nineteen Years in. By the Rev. G. Turner, LL.D.

Power of the Soul over the Body. By G. Moore, M.D.

Prayer Meeting Addresses.

Pre-Adamite Man.

Prodromus. See *Botany*.

Prophetic Outlines: 'The Four Kingdoms, as foreshadowed to
Daniel and St. John. By John Rees Mogg. 2 vols.

Prussia, The History of, from the time of the Knights of the
Cross and Sword to the Occupation of Hanover, 1867. By
M. A. D.

Q.

Quarterly Review. No. 264.

Quartz and Opal: An Elementary Treatise on. By G. W.
Traill.

R.

Radiation, The Phenomena of, as exemplifying the Wisdom and Beneficence of God. By G. Warington.

Regeneration viewed in Connection with Baptism.

Religious Subjects, Thoughts on. By a Layman.

Rénan, M., Reply to. See *Christ of the Gospels*.

Rolleston, Letters of Miss Frances. Edited by Caroline Dent.

Romanism, the Novelties of, in Three Parts. I. Development of Doctrines. II. Chronological Arrangement. III. Old and New Creeds contrasted. By C. H. Collette.

Rome, from the Fall of the Western Empire. By Rev. Canon Trevor, M.A.

Royal Institution of Great Britain, Proceedings of the, 1851-1869. 5 vols.

Royal Society, An Abridgment of the Philosophical Transactions of the. By Mr. Baddam. 10 vols.

Royal Society, Proceedings of, Vol. XIX. and XX., 1871-2, and the current parts.

Royal United Service Institution, Proceedings of, 1871-2. 2 vols. and the current parts.

Royal University of Norway, Philosophical Transactions (in Norwegian).

Rule of Road at Sea. By T. Gray. 3 copies.

S.

Salisbury, Reply to the Bishop of. By Archdeacon Martin.

Saturday Review. 28 vols.

Scepticism, The Anatomy of: an Examination into the Causes of the Progress which Scepticism is making in England. By R. B. Girdlestone, M.A.

Scepticism, Modern, viewed in Relation to Modern Science. By J. R. Young.

Science and Christian Thought. By J. Duns, D.D.

Science and Religion. By Rev. W. Baker, M.A.

Science and Scripture. See *Scripture*.

Science Gossip. 1871-2, and current numbers.

Science of Moderation. By W. Cave Thomas.

Scientific Opinion. Vols. I. to IV.

Scriptures. A Collation of the principal English Translations of the Sacred Scriptures. By C. Rogers.

Scripture and Science. See *Adam; Ages; Christianum Organum; Creation; Deluge; Exodus; Fresh Springs of Truth; Geology; Miracles; Scepticism; Truth of the Bible, &c.*

Scripture and Science not at Variance. By the late Archdeacon Pratt.

Scripture Atlas, Bagster's Chronological.

Secularist, Anti-, Lectures. By Rev. J. McCann, D.D.

Sermons on Stones. By D. M'Causland, Q.C., LL.D.

Shinar. The Scripture Record of the Confusion of Language and the Dispersion verified by Modern Discovery. By D. M'Causland, Q.C., LL.D.

Smithsonian Institution, Washington, Reports from 1868 to 1870.

Society of Arts, Journal of. 1858-60.

Society of Arts, Journal of. Vols. XVII. to XX., and current numbers.

Society of Biblical Archæology, Journal of. Parts I. and II.

Society for Promoting Social Science, Transactions of the, for 1867.

Soul's Life, The: its Commencement, Progress, and Maturity.

By Rev. E. Garbett, M.A.

Sower, Parable of the: an Exposition Explanatory and Practical. By R. Brown.

Speaker's Commentary. See *Bible*.

Species not Transmutable. By C. R. Bree, M.D.

Spiritual, Conformation of the Material by the. By W. Cave Thomas.

Statistical Abstract for the United Kingdom, 1854-1868.

Swedenborg Society, Works published by the. 38 vols. 1 volume of the Pamphlets.

T.

Tenby. By P. H. Gosse, F.R.S.

Theosophic Correspondence. Selections from the recently-published Correspondence between Louis Claude De Saint Martin and Kirchberger Baron De Liebestorf, during the years 1792-97. Edited by E. B. Penny.

Telegraph. See *Electric Telegraph*.

Thoughts on the Kingdom of God. By Rev. W. Niven, B.D.

Ti-ping Revolution, *see* China.

Truths *versus* Shadows. By F. R. Waring.

Vestiges of the Natural History of Creation.

W.

Weather-book, The ; a Manual of Practical Meteorology. By Rear-Admiral Fitzroy.

Whitaker's Almanack, 1870 to 1873.

Z.

Zoology, Marine. 2 vols. By P. H. Gosse, F.R.S.

P A M P H L E T S.

Aphasia. Dr. Bateman.

Babylonianism. R. Brown.

Bible in Unity with Science. T. Harriot. (Pamphlets, Vol. III.)

Biblical Archæology, Progress of. Dr. S. Birch. (Pamphlets, Vol. III.)

British Association. Address by Dr. Hooker.

Bunsen. Review of his Memoir.

Christ Coming.

Christian Faith, Formularies of. By Canon Lysons.

Clement, Epistle to. Translated by B. H. Cowper. (Pamphlets, Vol. III.)

Colenso, Dr. :—

Incredibilities of Part II. of Dr. Colenso's Work. J. C. Knight.
(Pamphlets, Vol. III.)

Pentateuchal Narrative Vindicated ; a Reply to Dr. Colenso. J. C.
Knight. (Pamphlets, Vol. III.)

Colloids, Influences of upon Forms of Inorganic Matter. By Dr. W.
Ord.

Conversion of a Chinese Physician, Narrative of the. By the Rev. H.
Moule.

Creation, the Plan of. (Pamphlets, Vol. II.)

Critical Letters. By Dr. H. Fraser Hallé. (Pamphlets, Vol. III.)

Days of the Son of Man, The. Sermon by the Rev. W. Lee, D.D.

Faith, The increase of. Sermon by the Rev. W. Lee, D.D.

Future Punishments, Duration and Nature of. By Rev. Prel.
Constable.

Geology :—

Deluge, Relics of. See *G. Advocate*, Nos. 23 and 35.

Denudation. (Pamphlets, Vol. II.)

Flint Implements. N. Whitley. (Pamphlets, Vol. I.)

Flint Implements. W. Whincopp. (Pamphlets, Vol. II.)

Flint Implements from Drift not authentic. By N. Whitley.

Life *versus* Denudation. (Pamphlets, Vol. I.)

South Staffordshire Coal Fields. (Pamphlets, Vol. II.)

God's Works and God's Saints ; Sermon. Rev. R. Thornton, D.D.

Gospel, Preaching the. A. Brown. (Pamphlets, Vol. III.)

- Hæmodromometers. W. H. Griffiths. (Pamphlets, Vol. I.)
 Hebrew Astral Alphabet. Rev. J. Broome. (Pamphlets, Vol. III.)
- Investigaciones Cientificas. Indalecio Lievano. (2 Copies in Spanish.)
- Jah, the Wonderful Word. E. Poulson.
 Jesuitism. R. Brown.
 Job, Identity of. By Canon Lysons. (Pamphlets, Vol. I.)
- Madeira, Discovery of. (Pamphlets, Vol. I.)
 Man's Science a Witness for God's Knowledge. By Archdeacon
 Freeman.
- Miracles :—
 Conversations on. E. B. Penny. (Pamphlets, Vol. I.)
 W. Fowler in reply to Mozley and Tyndall. (Do.)
 Molecular Archetypes. By Dr. McVicar.
 Molecular Motion, What Determines. By J. Croll.
 More Light.
 Morion's Dream.
 Musadu, Anderson's Journey to. (Appendix with Arabic MS.)
- Nova Scotian Institute, Proceedings of. 2 parts.
- Organology, Gall's. By T. S. Prideaux.
- Pacific, Cruise in. Rev. S. J. Whitmee.
 Pathology of Insanity. Dr. Shettle.
 Physical Science, Effect of the Cultivation of. Rev. J. H. Titcomb.
 (Pamphlets, Vol. III.)
 Pillar Stones and Cairns. (Pamphlets, Vol. II.)
 Protoplasm. Reply to Professor Huxley. E. B. Penny.
- Revelation, A Defence of the Record of. By J. Du Boulay.
 Revelation and Mythology. A. Flinders.
 Revelation and Science. Two Sermons. Rev. R. Phayre. (Pamph-
 lets, Vol. III.)
 Revelation, System in. J. McFarlane. (Pamphlets, Vol. I.)
 Roman Baths, Remains of. Dr. Haughton.
 Roman Census, Vindication of the Gospel Narrative by. J. von
 Gumpach. (Pamphlets, Vol. III.)
- Sea, Temperature of. N. Whitley. (Pamphlets, Vol. I.)
 Science and Anthropology. See *Eclectic*.
 Science, Claims of. Dr. Guy, F.R.S.
 Schools, Self-supporting. Rev. H. Moule.

Scripture and Science, Harmony of. By Archdeacon Freeman.

Sermons. By Rev. J. McDougall.

Sinaitic Manuscripts, Discovery of. (Pamphlets, Vol. III.)

Solar System. By J. McFarlane. (Pamphlets, Vol. I.)

Spirit and Soul. S. Hanson.

Spirit and Soul and Body. S. Hanson.

Swedenborg Society. 2 pamphlets.

Testaments, Alleged Historical Difficulties of the Old and the New,
Professor Rawlinson. (Pamphlets, Vol. III.)

Vital Force. Dr. Shettle.

Zoilism. By I. Poyer.

DONORS TO THE LIBRARY

During 1872.

*Biden, L., Esq.
 Brebner, A. C., Esq.
 Croll J., Esq.
 Du Boulay, J., Esq.
 Fraser, J. H., Esq., M.D., I.G.H.,
 Freeman, the Ven. Archdeacon P.
 *Gosse, P. A., Esq., F.R.S.
 Hardwicke, R., Esq.
 Haughton, E., Esq., M.D.
 Healey, Elkanah, Esq.
 Ince, W. H., Esq.
 Jardine, J., Esq., LL.D.
 Lee, Rev. W., D.D.
 MacVicar, Rev. J. G., D.D., LL.D.
 McArthur, A., Esq.
 M'Dougall, Rev. J.
 Moule, Rev. H.

Ord, Dr. W. M.
 Poyer, J., Esq.
 Thomas, W. Cave, Esq.
 Whitley, N., Esq.
 Whitmee, Rev. S. J.

Societies.

Royal Institution.
 Royal Society.
 Royal United Service Institution.
 Smithsonian Institution (Washington).
 Society of Arts.
 Society of Biblical Archaeology.
 Swedenborg Society.

* Special votes of thanks were conveyed to Mr. BIDEN and Mr. GOSSE for their numerous and very valuable donations.

APPENDIX (C).

OBJECTS, CONSTITUTION, AND BYE-LAWS

OF

The Victoria Institute,

OR

Philosophical Society of Great Britain.

Adopted at the First Annual General Meeting of the Members
and Associates, held on Monday, May 27th, 1867.

(Revised at the Annual Meeting, June 14, 1872.)

§ I. *Objects.*

1. THE VICTORIA INSTITUTE, or PHILOSOPHICAL SOCIETY OF GREAT BRITAIN, is established for the purpose of promoting the following objects, viz.:—

First. To investigate fully and impartially the most important questions of Philosophy and Science, but more especially those that bear upon the great truths revealed in Holy Scripture, with the view of reconciling any apparent discrepancies between Christianity and Science.

Second. To associate together men of Science and authors who have already been engaged in such investigations, and all others who may be interested in them, in order to strengthen their efforts by association; and, by bringing together the results of such labours, after full discussion, in the printed transactions of an Institution; to give greater force and influence to proofs and arguments which might be little known, or even disregarded, if put forward merely by individuals.

Third. To consider the mutual bearings of the various scientific conclusions arrived at in the several distinct branches into which Science is now divided, in order to get rid of contradictions and conflicting hypotheses, and thus promote the real advancement of true Science; and to examine and discuss all supposed scientific results with reference to final causes, and the more comprehensive and fundamental principles of Philosophy proper, based upon faith in the existence of one Eternal God, who, in His wisdom, created all things very good.

Fourth. To publish Papers read before the Society in furtherance of the above objects, along with full reports of the discussions thereon, in the form of a Journal, or as the Transactions of the Institute.

Fifth. When subjects have been fully discussed, to make the results known by means of Lectures of a more popular kind, and to publish such Lectures.

Sixth. To publish English translations of important foreign works of real scientific and philosophical value, especially those bearing upon the relation between the Scriptures and Science; and to co-operate with other philosophical societies at home and abroad, which are now or may hereafter be formed, in the interest of Scriptural truth and of real science, and generally in furtherance of the objects of this Society.

Seventh. To found a Library and Reading Rooms for the use of the Members and Associates of the Institute, combining the principal advantages of a literary Club.

§ II. *Constitution.*

1. The Society shall consist of Members and Associates, who in future shall be elected as hereinafter set forth.

2. The government of the Society shall be vested in a Council, to which members only shall be eligible, consisting of a President, two or more (not exceeding seven) Vice-presidents, a Treasurer, one or more Honorary Secretaries, and twelve or more (not exceeding twenty-four) Ordinary Members of

Council, who shall be elected at the Annual General Meeting of the Members and Associates of the Institute. But, in the interval between two annual meetings, vacancies in the Council may be filled up by the Council from among the Members of the Society; and the Members chosen as Trustees of the funds of the Institute shall be *ex officio* Members of Council.

3. Any person desirous of becoming a Member or Associate shall make application for admission by subscribing the Form A of the Appendix, which must be signed by two Members of the Institute, or by a Member of Council, recommending the candidate for admission as a Member; or by any one Member of the Institute, for admission as an Associate.

4. Upon such application being transmitted to one of the Secretaries, the candidate for admission may be elected by the Council, and enrolled as a Member or Associate of the Victoria Institute, in such manner as the Council may deem proper; having recourse to a ballot, if thought necessary, as regards the election of Members; in which case no person shall be considered as elected unless he have three-fourths of the votes in his favour.

5. Application for admission to join the Institute being thus made by subscribing Form A, as before prescribed, such application shall be considered as *ipso facto* pledging all who are thereupon admitted as Members or Associates to observe the Rules and Bye-Laws of the Society, and as indicative of their desire and intention to further its objects and interests; and it is also to be understood that only such as are professedly Christians are entitled to become *Members*.

6. Each Member shall pay an Entrance Fee of One Guinea, and an Annual Contribution of Two Guineas. A Donation of Twenty Guineas shall constitute the donor a Life Member.

7. Each Associate shall pay an Annual Contribution of One Guinea. A donation of Ten Guineas shall constitute the donor a Life Associate.

8. The Annual Contributions shall be considered as due in advance on the 1st day of January in each year, and shall be

paid within three months after that date; or, in the case of new admissions, within three months after election.

9. Any Member or Associate who contributes a donation in one sum of not less than Sixty Guineas to the funds of the Institute shall be enrolled as a Vice-Patron thereof, and will thus also become a Life Member or Life Associate, as the case may be.

10. Should any member of the Royal Family hereafter become the Patron, or a Vice-Patron, or Member of the Institute, the connection shall be regarded as purely Honorary; and none of the Rules and Bye-Laws relating to donations, annual contributions, or obligations to serve in any office of the Society, shall be considered as applicable to such personages of Royal Blood.

11. Any Member or Associate may withdraw from the Society at any time, by signifying a desire to do so by letter, addressed to one of the Secretaries, but such shall be liable for the contribution of the current year, and shall continue liable for the annual contribution, until all sums due to the Society from such Member or Associate shall have been paid, and all books or other property borrowed from the Society shall have been returned or replaced.

12. Should there appear cause, in the opinion of the Council, for the exclusion from the Society of any Member or Associate, a private intimation may be made by direction of the Council, in order to give such Member or Associate an opportunity of withdrawing from the Society; but, if deemed necessary by the Council, a Special General Meeting of Members shall be called for the purpose of considering the propriety of expelling any such person: whereat, if eleven or more Members shall ballot, and a majority of those balloting shall vote that such person be expelled, he shall be expelled accordingly. One month's notice, at least, shall be given to the Members of any such Special General Meeting.

13. Non-resident Members and Associates, or others desirous of promoting the objects and interests of the Institute, may be elected by the Council to act as Corresponding Mem-

bers abroad, or as Honorary Local Secretaries, if within the United Kingdom, under such arrangements as the Council may deem advisable.

14. The whole property and effects of the Society shall be vested in two or more Trustees, who shall be chosen at a General Meeting of the Society.

15. The accounts shall be audited annually, by a Committee, consisting of two Members,—one on the Council, the other not a Member thereof,—to be elected at an Ordinary Meeting of the Society preceding the Anniversary Meeting. This Committee shall make a written Report to the Council at the first Meeting after such audit, and also to the Institute, upon the day of the Annual General Meeting,—stating the balance in the Treasurer's hands, and the general state of the funds of the Institute.

16. Both Members and Associates shall have the right to be present to state their opinion, and to vote by show of hands at all General and Ordinary Meetings of the Society; but Members only shall be entitled to vote by ballot, when a ballot is taken in order to determine any question at a General Meeting.

§ III. *Bye-Laws* (Privileges).

1. A Member or Associate, when elected, shall be so informed by the Secretary in a printed copy of the letters Form B, in the Appendix.

2. Members and Associates shall not be entitled to any privileges, or have the right to be present, or to vote at any of the Meetings of the Society, till they have paid the contributions due by them.

3. Annual subscriptions shall be considered as in arrear, if not paid on or before 31st March in each year, or within three months after election, as the case may be.

4. Should any annual subscription remain in arrear to the 30th June, or for six months after election, the Treasurer shall cause to be forwarded to the Member or Associate from whom the subscription is due, a letter, Form D, in the Appendix,

unless such Member or Associate reside out of the United Kingdom; in which case the form D shall not be sent unless the subscription continues unpaid till the 30th September.

5. If any arrears be not paid within twelve months, the Council shall use their discretion in erasing the name of the defaulter from the list of Members or Associates.

6. Members shall be entitled to introduce two Visitors at the Ordinary Meetings of the Society; and to have sent to them a copy of all the papers read before the Society, which may be printed in its Transactions or otherwise, and of all other official documents which the Council may cause to be printed for the Society; they will also be entitled to a copy of all such translations of foreign works or other books as are published under the auspices of the Society in furtherance of Object 6 (§ I.).

7. Associates may introduce one visitor at the Ordinary Meetings, and shall be entitled to all the minor publications of the Society, and to a copy of its Transactions during the period of their being Associates, but not to the translations of foreign works or other books above referred to. It shall, however, be competent to the Council of the Society, when its funds will admit of it, to issue the other publications of the Society to Associates, being ministers of religion, either gratuitously or at as small a charge as the Council may deem proper.

8. When it shall be found necessary to send the letter, Form D, to any Member or Associate who may be in arrear, the printed papers and other publications of the Society shall cease to be sent to such Member or Associate till the arrears are paid; and, until then, he shall not be allowed to attend any Meeting of the Society, nor have access to any public rooms which may be in its occupation.

9. The Library shall be under the management and direction of the Council, who are empowered to designate such works as shall not be allowed to circulate.

10. Each Member shall be allowed to borrow books from the Library, and to have not more than three volumes in his possession at the same time; pamphlets and periodical

publications not to be kept above fourteen days, nor any other book above three weeks.

11. Members who may borrow books from the Library shall be answerable for the full value of any work that is lost or injured.

12. Periodical publications shall remain on the table for a month, other books for a fortnight, after they are received.

13. When a book or pamphlet is wanted, and has been the stipulated time in the possession of any Member, the Secretary shall request its return, and a fine of threepence a day shall be incurred for every day it may be detained, which fine shall commence on the third day after the transmission of the notice in the case of town Members, and after the sixth day in the case of country Members; and until the return of such works, and the discharge of all fines incurred, no further issue of books shall be permitted to the Member applied to.

14. The books shall be ordered in for inspection at such times as the Council shall appoint, and a fine of half-a-crown shall be incurred for neglecting to send in books by the time required in the notice.

15. A Book shall be on the Library table in which Members may insert, for the consideration of the Council, the titles of such works as they desire to be purchased for the Institute.

§ IV. *Bye-Laws* (General and Ordinary Meetings).

1. A General Meeting of Members and Associates shall be held annually on May 24th (being Her Majesty's birthday, and the Society's anniversary), or on the Monday following, or on such other day as the Council may determine as most convenient, to receive the Report of the Council on the state of the Society, and to deliberate thereon; and to discuss and determine such matters as may be brought forward relative to the affairs of the Society; also, to elect the Council and Officers for the ensuing year.

2. The Council shall call a Special General Meeting of the Members and Associates, when it seems to them necessary, or

when required to do so by requisition, signed by not less than ten Members and Associates, specifying the question intended to be submitted to such Meeting. Two weeks' notice must be given of any such Special General Meeting; and only the subjects of which notice has been given shall be discussed thereat.

3. The Ordinary Meetings of the Society shall usually be held on the first and third Monday evenings in each month, from November to June inclusive, or on such other evenings as the Council may determine to be convenient; and a printed card of the Meetings for each session shall be forwarded to each Member and Associate.

4. At the Ordinary Meetings the order of proceeding shall be as follows:—The President, or one of the Vice-Presidents, or a Member of the Council, shall take the chair at 8 o'clock precisely, the minutes of the last Ordinary Meeting shall be read aloud by one of the Secretaries, and, if found correct, shall be signed by the Chairman; the presents made to the Society since their last Meeting shall be announced; the names of new Members and Associates shall be read; and any other communications which the Council think desirable shall be made to the Meeting. After which, the Paper or Papers intended for the evening's discussion shall be announced and read, and the persons present shall be invited by the Chairman to make any observations thereon which they may wish to offer.

5. The Papers read before the Society, and the discussions thereon, fully reported, shall be printed by order of the Council; or, if not, the Council shall, if they see fit, state the grounds upon which this Rule has been departed from, in the printed Journal or Transactions of the Society.

6. The Council may at their discretion authorize Papers of a general kind to be read at any of the Ordinary Meetings, either as introductory lectures upon subjects proper to be afterwards discussed, or as the results of discussions which have taken place, in furtherance of the 5th Object of the Society (§ I.).

7. With respect to Intermediate Meetings, at which the discussions are not necessarily reported, the Council, at its discretion, may request any lecturer or author of a paper to be read thereat, previously to submit an outline of the proposed method of treating his subject.

8. At the Ordinary Meetings no question relating to the Rules or General Management of the affairs of the Society shall be introduced, discussed, or determined.

§ V. *Bye-Laws* (Council Meetings).

1. The Council shall meet at least once every month from November to June inclusive, or at any other time and on such days as they may deem expedient. The President, or any three Members of the Council, may at any time call a Special Meeting, to which the whole Council shall be summoned.

2. At Council Meetings three shall be a quorum ; the decision of the majority shall be considered as the decision of the Meeting, and the Chairman shall have a casting vote.

3. Minutes of the proceedings shall be taken by one of the Secretaries, or, in case of his absence, by some other Member present, whom the Chairman may appoint ; which minutes shall afterwards be entered in a minute-book kept for that purpose, and read at the next Meeting of the Council, when, if found correct, they shall be signed by the Chairman.

§ VI. *Bye-Laws* (Papers).

1. Papers presented to be read before the Society shall, when read, be considered as the property of the Society, unless there shall have been any previous engagement with its author to the contrary ; and the Council may cause the same to be published in any way and at any time they may think proper after having been read. If a Paper be not read, it shall be returned to the author ; and if a Paper be not published within a reasonable time after having been read, the author shall be entitled himself to publish it, and he may borrow it for that purpose.

2. When a Paper is sent to the Society for the purpose of being read, it shall be laid before the Council, who shall refer

it to two of their own body, or of the other Members or Associates of the Society whom they may select, for their opinions as to the character of the Paper and its fitness or otherwise for being read before the Society, which they shall state as briefly as may be, in writing, along with the grounds of their respective opinions. Should one of such opinions be adverse to the Paper and against its being read before the Society, then it shall be referred to some other referee, who is unaware of the opinion already pronounced upon the Paper, in order that he may state his opinion upon it in like manner. Should this opinion be adverse to the Paper, the Council shall then consult and decide whether the Paper shall be rejected or read; and, if rejected, the Paper shall be returned to the author with an intimation of the purport of the adverse opinions which have been given with respect to it; but the names of the referees are not to be communicated to him, unless with their consent, or by order of the Council. All such references and communications are to be regarded as confidential, except in so far as the Council may please to direct otherwise.

3. The Council may authorize Papers to be read without such previous reference for an opinion thereon; and when a Paper has been referred, and the opinion is in favour of its being read in whole or in part, the Council shall then cause it to be placed in the List of Papers to be so read accordingly, and the author shall receive due notice of the evening fixed for its reading.

4. The authors of Papers read before the Society shall, if they desire it, be presented with twenty-five separate copies of their Paper, with the discussion thereon, or with such other number as may be determined upon by the Council.

§ VII. *Bye-Laws* (General).

1. The government of the Society and the management of its concerns are entrusted to the Council, subject to no other restrictions than are herein imposed, and to no other interference than may arise from the acts of Members in General Meeting assembled.

2. With respect to the duties of the President, Vice-Presidents, and other Officers and Members of Council, and any other matters not herein specially provided for, the Council may make such regulations and arrangements as they deem proper, and as shall appear to them most conducive to the good government and management of the Society, and the promotion of its objects. And the Council may hire apartments, and appoint persons not being Members of the Council, nor Members or Associates of the Institute, to be salaried officers, clerks, or servants, for carrying on the necessary business of the Society; and may allow them respectively such salaries, gratuities, and privileges, as to them, the Council, may seem proper; and they may suspend any such officer, clerk, or servant from his office and duties, whenever there shall seem to them occasion; provided always, that every such appointment or suspension shall be reported by the Council to the next ensuing General Meeting of the Members, to be then confirmed or otherwise, as such Meeting may think fit.

FORM A.

FORM OF APPLICATION for the Admission of Vice-Patrons, Members, or Associates of the VICTORIA INSTITUTE.

[Date] _____ 187 .

I hereby desire to be enrolled a * _____ of the VICTORIA INSTITUTE, OR PHILOSOPHICAL SOCIETY OF GREAT BRITAIN.

* Here insert
Vice-Patron,

or

Member,

or

Life Member,

or

Associate,

or

Life Associate.

Candidate's ordinary Signature,
and full name, if necessary.

{ _____

Title, Profession, University degree,
&c., or other distinction.

{ _____

Address _____

If an Author, the name of the Candidate's works may be here stated.

{ _____

Recommended by _____

To be signed by two Members, or an Honorary Officer of the Institute, or Member of Council, in the case of a Member; or by any one Member in the case of an Associate.

To the Honorary Officers of the VICTORIA INSTITUTE,
8, Adelphi Terrace, Strand, London, W.C.

FORM B.

SIR,

18 .

I have the pleasure to inform you, with reference to
your application dated the _____, that you have
duly been elected a _____ of the VICTORIA INSTITUTE, OR
PHILOSOPHICAL SOCIETY OF GREAT BRITAIN.

I have the honour to be,

Sir,

Your faithful Servant,

To _____

Hon. Sec.

FORM C.

(Bankers) Messrs. _____

* Please pay Messrs. RANSOM, BOUVERIE, & Co. my
Annual Contribution of Two GUINEAS to the VICTORIA
INSTITUTE, due on the 1st of January, 187 , and the
same amount on that day in every succeeding year, until
further notice.

I am,

Your obedient Servant,

_____ 187 .

If this Form be used, please add your Signature, Banker's Name, and the
Date, and return it to the Office, 8, Adelphi Terrace. Receipt-stamp required.

* The above is the form for Members. The form for Associates is the same,
except that the Subscription stands as "ONE GUINEA."

FORM D.

SIR,

18 .

I am directed by the Council of the VICTORIA INSTITUTE to remind you that the Annual Contribution due by you to the Society for the year _____ is now six months in arrear; and I have to call attention to the Bye-Laws of the Institute, § III., ¶ 4 and 8, and to request you to remit to me the amount due (viz. £ _____) by Post-office order, or otherwise, at your earliest convenience.

I have the honour to be,

Sir,

Your faithful Servant,

To _____

Treasurer.

FORM E.

Form of Bequest.

I give and bequeath to the Trustees or Trustee for the time being of THE VICTORIA INSTITUTE, OR PHILOSOPHICAL SOCIETY OF GREAT BRITAIN, to be applied by them or him for the purposes of the said Society, the sum of £ _____, such sum to be wholly paid out of such part of my personal estate as may be lawfully applied to the purposes of charity, and in priority to all other legacies. And I declare that the receipt of the Trustees or Trustee for the time being of the said Society shall be a good discharge to my Executors for the said legacy.

